78.17
TN
1
A52
1913
ENGINEERING
ENGIN STORAGE

American Institute of Mining Engineers.

YEAR BOOK.

Officers, Members, Rules, Etc.

March 1, 1913.

LIBRARY
NOV 7 1933
UNIVERSITY OF TORONTO

MARCH 1, 1913

American Institute of Mining Engineers

YEAR BOOK

CONTAINING LISTS OF OFFICERS, PAST OFFICERS, MEMBERS, AFFILIATED STUDENT SOCIETIES, MEETINGS, PUBLICATIONS, AND CONSTITUTION AND BY-LAWS

ORGANIZED IN 1871
INCORPORATED IN 1905

PUBLISHED BY THE AMERICAN INSTITUTE OF MINING ENGINEERS
29 West 39th Street, New York, N. Y.
Cable Address, "Aime," Western Union Telegraphic Code

OFFICERS.

For the year ending February, 1914.

PRESIDENT.

CHARLES F. RAND, ... NEW YORK, N. Y.
(Term expires February, 1914.)

PAST PRESIDENTS.

CHARLES KIRCHHOFF, ... NEW YORK, N. Y.
(Term expires February, 1914.)

JAMES F. KEMP, ... NEW YORK, N. Y.
(Term expires February, 1915.)

FIRST VICE-PRESIDENT.

BENJAMIN B. THAYER, ... NEW YORK, N. Y.
(Term expires February, 1914.)

TREASURER.

GEORGE C. STONE, ... NEW YORK, N. Y.
(Term expires February, 1914.)

SECRETARY EMERITUS.

ROSSITER W. RAYMOND, ... NEW YORK, N. Y.

SECRETARY.

BRADLEY STOUGHTON, ... NEW YORK, N. Y.
(Term expires February, 1914.)

VICE-PRESIDENTS.

KARL EILERS, ... District 0 . . . . . NEW YORK, N. Y.
WALDEMAR LINDGREN, ... District 1 . . . . . BOSTON, MASS.
(Term expires February, 1914.)

BENJAMIN B. THAYER, ... District 0 . . . . . NEW YORK, N. Y.
SIDNEY J. JENNINGS, ... District 0 . . . . . NEW YORK, N. Y.
(Term expires February, 1915.)

THOMAS H. LEGGETT, ... District 0 . . . . . NEW YORK, N. Y.
FRED W. DENTON, ... District 4 . . . . . PAINESDALE, MICH.
(Term expires February, 1916.)

DIRECTORS.

JAMES DOUGLAS, ... District 0 . . . . . NEW YORK, N. Y.
JAMES GAYLEY, ... District 0 . . . . . NEW YORK, N. Y.
ALBERT R. LEDOUX, ... District 0 . . . . . NEW YORK, N. Y.
CHARLES W. MERRILL, ... District 6 . . . . SAN FRANCISCO, CAL.
C. SNELLING ROBINSON, ... District 3 . . . . . YOUNGSTOWN, OHIO.
(Term expires February, 1914.)

EDMUND B. KIRBY, ... District 3 . . . . . ST. LOUIS, MO.
JOSEPH A. HOLMES, ... District 9 . . . . . WASHINGTON, D. C.
ROBERT W. HUNT, ... District 3 . . . . . CHICAGO, ILL.
GEORGE C. STONE, ... District 0 . . . . . NEW YORK, N. Y.
EDWARD L. YOUNG, ... District 0 . . . . . NEW YORK, N. Y.
(Term expires February, 1915.)

JOHN W. FINCH, ... District 7 . . . . . DENVER, COLO.
JOHN H. JANEWAY, JR., ... District 0 . . . . . NEW YORK, N. Y.
EDWARD P. MATHEWSON, . . . District 5 . . . . . ANACONDA, MONT.
JOSEPH W. RICHARDS, ... District 2 . . . SOUTH BETHLEHEM, PA.
L. D. RICKETTS, ... District 10 . . CANANEA, SON., MEXICO.
(Term expires February, 1916.)

Consulting Attorneys, Blair & Rudd, New York, N. Y.

HONORARY MEMBERS.

Year of Election.		
1876.	Prof. Richard Åkerman	Stockholm, Sweden.
1909.	Prof. Richard Beck	Freiberg, Germany.
1905.	Andrew Carnegie	New York, N. Y.
1906.	Dr. James Douglas	New York, N. Y.
1888.	Prof. Haton de la Goupillière	Paris, France.
1906.	Sir Robert A. Hadfield	London, England.
1888.	Prof. Hans Hoefer	Leoben, Austria.
1905.	Prof. Henri Louis Le Chatelier	Paris, France.
1909.	Alexander Pourcel	Paris, France.
1911.	Dr. Rossiter W. Raymond	New York, N. Y.
1911.	Prof. Robert H. Richards	Boston, Mass.
1909.	Dr. Ing. H. C. Emil Schroedter	Düsseldorf, Germany.
1906.	John E. Stead	Middlesbrough, England.
1909.	James M. Swank (Associate)	Philadelphia, Pa.
1902.	Prof. Dimitry Constantin Tschernoff	St. Petersburg, Russia.
1910.	Prof. Tsunashiro Wada	Tokyo, Japan.
1907.	Charles D. Walcott	Washington, D. C.

Honorary Members (*Deceased*).

		Year of Decease.
1872.	Bell, Sir Lowthian	1904
1892.	Castillo, A. Del	1895
1902.	Contreras, Manuel Maria	1902
1888.	Daubrée, A	1896
1884.	Drown, Thomas M	1904
1890.	Gaetzschmann, Moritz	1895
1873.	Gruner, L	1883
1891.	Kerl, Bruno	1905
1895.	Le Conte, Joseph	1901
1891.	Lesley, J. P	1896
1899.	Osmond, Floris	1912
1890.	Patera, Adolph	1890
1886.	Percy, John	1889
1888.	Posepny, Franz	1895
1884.	Richter, Theodor	1898
1899.	Roberts-Austen, W. C	1902
1890.	Serlo, Albert	1898
1880.	Siemens, C. William	1883
1872.	Thomas, David	1882
1873.	Tunner, Peter R. von	1897
1885.	Wedding, Hermann	1908

PAST OFFICERS.

Presidents.

*David Thomas....1871
R. W. Raymond....1872–1874
*A. L. Holley....1875
*Abram S. Hewitt....1876
*T. Sterry Hunt....1877
*Eckley B. Coxe....1878–1879
*William P. Shinn....1880
*William Metcalf....1881
*Richard P. Rothwell....1882
Robert W. Hunt....1883
James C. Bayles....1884–1885
Robert H. Richards....1886
*Thomas Egleston....1887
William B. Potter....1888
Richard Pearce....1889
*Abram S. Hewitt....1890
John Birkinbine....1891–1892
H. M. Howe....1893
*John Fritz....1894
*J. D. Weeks....1895
E. G. Spilsbury....1896
*Thomas M. Drown....1897
Charles Kirchhoff....1898
James Douglas....1899–1900
E. E. Olcott....1901–1902
Albert R. Ledoux....1903–1904
James Gayley....1905
Robert W. Hunt....1906
John Hays Hammond....1907–1908
D. W. Brunton....1909–1910
Charles Kirchhoff....1911
James Gayley (Corporation)....1905–1911
James F. Kemp (Council and Corporation)....1912
Charles F. Rand....1913

Secretaries.

*Martin Coryell....1871–1872
*Thomas M. Drown....1873–1884
R. W. Raymond....1884–1911
Joseph Struthers....1911–1912
Bradley Stoughton....1913 ——

Treasurers.

J. Pryor Williamson....1871–1872
*Theodore D. Rand....1872–1903
Frank Lyman....1903–1912
George C. Stone....1913 ——

OFFICERS OF THE INSTITUTE FROM 1871 TO 1913, inclusive.

P, President; PD, President of Board of Directors; PP, Past President; V, Vice-President; VD, Vice-President of Board of Directors; M, Manager; S, Secretary; SD, Secretary of Board of Directors; S. Em, Secretary Emeritus; s, Assistant Secretary; T, Treasurer; t, Assistant Treasurer; D, Director; C, Councilor; E, Editor; and e, Assistant Editor.

Alexander, John S., M, '74–6, '81–3.
Ashburner, C. A., M, '85–7.
Asmus, George, M, '78–80.
Bacon, D. H., M, '00–2.
Bayles, James C., M, '80–2, '91–3; P, '84–5; V, '88–9.
Birkinbine, John, M, '83–5; V, '87–8; P, '91–2.
Blair, Thomas S., M, '74–6.
Blake, William P., V, '71–4, '76–7, '05–6.
Blandy, John F., V, '71–3, '78–9.
Blow, A. A., C, '05–7.
Bowie, A. J., Jr., V, '93–4.
Bramwell, J. H., M, '89–91.
Brooks, Thos. B., M, '72.
Brunton, D. W., V, 97–8; P, '09–10.
Buck, Stuart M., M, '83–5.
Burden, James A., V, '80–1.
Burnham, William, M., '82–4.
Campbell, H. H., M, '93–5.

* Deceased.

Carlton, Albert E., C, '11-12.
Chamberlain, H. S., V, '96-7.
Channing, J. Parke, V, '08-9.
Christy, S. B., V, '91-2, '07-8, '11-12.
Church, John A., M, '79-81, '94-6; V, '07-8.
Cogswell, W. B., V, '74-5, '86-7.
Cole, Thos. F., V, '05-6.
Cook, Edgar S., M, '84-6.
Corning, C. R., C, '08-9.
Coryell, Martin, S, '71-2; M, '73-5.
Cox, E. T., M, '77-9.
Coxe, Eckley B., V, '71-4, '76-7, '84-5, '89-90; P, 78-9.
Coxe, Wm. E. C., M, '79-81, '85-7.
Crocker, G. A., M, '01-3.
Day, D. T., V, '92-3, '00-1.
DeLandero, C. F., V, '02.
Denton, Frederick R., V, '08-9, '13.
DeSaulles, A. B., M, '87-9.
Devereux, W. B., M, '98-00.
D'Invilliers, E. V., V, '94-5; M, '00-2.
Douglas, James, V, '97-8; P, '99-00; D, '05-13; VD, '06-11.
Drinker, Henry S., M, '77-9.
Drown, Thomas M., M, '72; S, '73-83; V, '92-3; P, '97.
Dudley, Charles B., V, '80-81.
Dwight, Arthur S., C, '09-10.
Dwight, Theodore, s, '95-05; t, '98-05; D, '06-11; C, '06-8.
Egleston, Thomas, M, '71; V, '72-4, '77-8, '84-5; P, '87.
Eilers, Anton, M, '75-7, '82-4; V, '96-7.
Eilers, K., C, '09-11; V, '12-13.
Ely, T. N., V, '82-3,
Emmons, S. F., V, '83-4, '90-1, '02-3.
Eustis, W. E. C., V, '97-8.
Fackenthal, B. F., Jr., M, '87-9; C, '07-9.
Farish, John B., V, '08-9.
Feustman, L. P., V, '98-9.
Finch, John W., D, '13.
Firmstone, Frank, M, '73, '84-6, '89-91; V, '75-6.
Forsyth, Robert, M, '88-90.
Frazer, Persifor, V, '80-1, '07-8.
Frazier, B. W., M, '74-6, '78-80.
Fritz, John, V, 75; P, '94.
Fulton, John, V, '85-6.
Gayley, James, M, '96-8; V, '02-3; PD, '05-11; D, '05-13.
Gaujot, E., M, '71-2.
Glenn, William, M, '99-01
Goetz, Geo. W., M, '92-4; V, '01.
Goodale, C. W., M, '97-9.
Grammer, F. L., M, '04; C, '05-6.
Grant, J. B., V, '06-7.
Hague, Jas. D., V, '06-7.
Hammond, J. H., V, '01-2; P, '07-8.
Hardman, J. E., V. '01-2.
Hartshorne, Joseph, M, '04; C, '05-6.
Heinrich, Oswald J., M, '75-7.
Hewitt, Abram S., M, '72-5; P, '76, '90
Hofman, H. O., M, '94-6; C, '07-9.
Holbrook, Levi, M, '95-7.
Holley, A. L., V, '74; P, '75; M, '77-9.
Hollis, H. L., M, '92-4.
Holloway, J. F., V, '87-8, '94-5.
Holmes, Joseph A., D, '13.
Howe, H. M., V, '79-80, '90-1, '06-7; M, '86-8; P, '93.
Humphreys, A. C., C, '09-11.
Hunt, A. E., V, '88-9.
Hunt, Robert W., M, '76-8; P, '83, '05-6; D, '13.
Hunt, T. Sterry, M, '73-5; P, '77; V, '88-9.
Ingalls, W. R., C, '07-9.
Janeway, John H., Jr., C, '12; D, '13.
Jennings, Robert E., C, '10-12.
Jennings, Sidney J., C, '12; V, '13.
Johnson, J. E., M, '86-8, '01.
Jones, Clemens C., M. '02-3.
Kelly, William, C, '10-12.
Kemp, J. F., M, '96-8; V, '03-4; D, '05-12; P, '12; PD, 12; PP, '13.
Kennedy, J., V, '04-5.
Kent, Joseph C., V, '74-5.
Kent, William, M, '00-2.
Kerr, W. C., V, '83.
Keyes, W. S., M, '80-2; V, '84.
Kimball, J. P., V, '81-2.
Kirby, E. B., VD, '12; D. '13.
Kirchhoff, C., M, '87-9, '92-4; V, '96-7; P, '98, '11; D, '07-12; PP, '13.
Klepetko, Frank, M, '03-4; C, '05; D, '05-6.
Kunhardt, W. B., V, '95-6.
Kunz, Geo. F., V, '99-01.
Lathrop, William A, V, '11-12.
Lawrence, B. B., M. '03-4; C, '05; V, '10-11.
Leckie, Robt. G., V, '93-4.
Ledoux, Albert R., M, '95-7; V, '98-9; P. '03-4; D, '05-13.
Lee, J. H., V, '02-3.
Leggett, Thomas H., V, '13.
Lesley, J. P., M, '72-4.
Lewis, James F., M, '79-81; V, '86-7, '95-6.
Lindgren, Waldemar, V, '12-13.
Lyman, B. S., M, '96-8.
Lyman, Frank, M, '97-9; T, '03-12; C, '05-6; D, '05-12.
Macdonald, Charles, V, 82-3, '89-90.
Mackintosh, J. B., M, '91.
Markle, John, V, '03-4.
Mathewson, E. P., D, '13.
Maynard, George W., M, '71-4, '85-6; V, '04-5.
McCreath, Andrew S., M, '82-4.
McNair, T. S., M. '71, '84.
Metcalf, William, V, '78-9; P, '81.
Miller, Willet G., C, '09-11.
Moen, Philip W., V, '03-4.
Moffat, E. S., M, '83, '85; V, '87, '89.
Munroe, H. S., M, '81-4; V, '90-1.
Neill, James W., M, '02-4.
Neilson, W. G., M, '86-8.
Newberry, J. S., M, '76-8.
Norris, R. V., C, '08-10.
Olcott, E. E., P, '01-2.
Olcott, W. J., M, '98-00; C, '11-12; D, '13.
Page, W. N., V, '99-00.
Parker, E. W., M, '02-4.
Pearce, Richard, V, '85-6; P, '89.
Pearse, John B., V, '77-8.
Pechin, E. C., M, '72; V, '73, '75-6, '85, '91-2.
Peters, E. D., Jr., V, '98-9.
Petherick, Thomas, M, '71-2, V, '84.
Pettee, Wm. H., M, '73, '89-91; V, '81-2.
Platt, J. C., V, '94-5.
Porter, J. A., M, '91-3.
Potter, E. C., V. '99-00.
Potter, William B., M, '78-80; P, '88.
Powell, J. W., V, '82-3.
Prime, Fred., Jr., M, '71-3.
Pumpelly, Raphael, M, '71.
Ralston, W. C., V, '00-1, '09-10.
Rand, Charles F., C, '10-12; D, '12; P, '13.
Rand, Theodore D., T, '73-02.
Randol, J. B., V, '00-1.
Randolph, J. C. F., M, '81-3; V, '91-2.
Raymond, R. W., V, '71, '76-7; P, '72-4; S, '84-11; S. Em, '11-12.
Richards, Joseph W., V, '10 '11; C, '12; D, '13.
Richards, Robert H., V, '79-80; P, '86.
Rickard, T. A., M, '94-6; D, '05; C, '05-6.
Ricketts, L. D., D, '13.
Ries, Heinrich, M, '03-4; C, '05.
Roberts, Percival, Jr., M, '80-2; V, '89-90.
Robertson, Kenneth, M, '88-90.
Robertson, Wm. F., C, '06-8.
Robinson, C. S., D, '13.
Rolker, C. M., M, '88-90
Rothwell, Richard P., M, '71, '98-00; V, '72-3, '75-6; P, '82
Saunders, W. L., V, '09-10.
Sauveur, Albert, V, '10, '11.
Sheafer, W. L., M, 93-5.
Shinn, William P., V, '77-8; P, '80.
Shockley, William H., C, '08-10.
Shook, A. M., M, '93-5.
Smock, John C., M, '75-7, '91-3.
Snow, Chas. H., M, '04; C, '05-6; D, '05-10.
Spilsbury, E. G., M, '85-7; V, '93-4; P, '96.
Stanton, F. McM., M, '97-9.
Stanton, John, V, '92-3.
Stearns, I. A., V, '05-6.
Stetefeldt, C. A., V, '85-6, '95-6.
Stone, G. C., SD, '12; D, T, '13.
Stoughton, Bradley, S, '13.
Struthers, J., e, '03-5; s, '06-10; t, E, '06-12; D, 11; S, '11-12
Swoyer, J. H., V, '71.
Symons, W. R., V, '71-2; M, '73-4.
Taylor, W. J., M, '90-2, '99-01.
Thayer, Benjamin B., V, '12-13.
Thurston, Robert H., V, '78-9.
Thomas, David, P, '71.
Thomas, Samuel, V, '79-80.
Thompson, Charles O., V, '81-2.
Valentine, M. D., M, '02-4.
Walcott, C. D., V, '04-5.
Walker, Arthur L., D, '11.
Webster, William R. M, '95-7.
Weeks, J. D., V, '86-7; M, '90-2; P, '95.
Wellman, S. T., V, '83-4; M, '90-2.
Williams, Gardner F., V, '11-12.
Williams, T. M., M, '71.
Williamson, J. Pryor, T, '71-2.
Winchell, H. V., M, '01-3; V, '09-10.
Winslow, A., M, '99-01.
Witherbee, Thos. F., M, '76-8.
Wood, Walter, C, '06-8.
Young, Edward L., C, '11-12; D, '13.

MEMBERS AND ASSOCIATES.

Corrected to March 1, 1913.

THOSE MARKED THUS * ARE MEMBERS; MARKED THUS † ARE ASSOCIATES. THESE SIGNS DOUBLED INDICATE LIFE MEMBERS AND ASSOCIATES RESPECTIVELY. THE FIGURES AT THE END OF THE ADDRESS INDICATE THE YEAR OF ELECTION. HEAVY-FACED TYPE SIGNIFIES HONORARY MEMBERSHIP.

*Aarons, J. Boyd, Genl. Mgr., Chaffers G. M. Co., Boulder, West. Australia. '05
*Abadie, Emile R., Min. Engr.....P. O. Box 566, Porterville, Cal. '76
†Abbé, Max F., Prest., Abbé Engineering Co., 220 Broadway, New York, N.Y. '07
*Abbott, Clarence E., Genl. Supt., Iron Mines Div.,
Tennessee Coal, Iron & R. R. Co., Bessemer, Ala. '04
*Abbott, James W., Min. Engr.....Hotel Hollenbeck, Los Angeles, Cal. '94
*Abbott, Robert R., Met. Engr., Peerless Motor Car Co...Cleveland, Ohio. '12
†Acker, E. O'C., Met., Bethlehem Steel Co.....South Bethlehem, Pa. '86
*Acker, Louis K., Jr., Min. Engr.....565 Highland Pl., Bellevue, Pa. '08
*Adachi, Jinzoo.....No. 11 Shiba Park, Shiba-ku, Tokyo, Japan. '88
*Adami, Charles J., Min. Engr.....Rivermines, Mo. '12
*Adams, Arthur K., Min. Geol.....Mogollon, N. M. '06
*Adams, Cuyler, Prest. and Genl. Mgr., Cuyana & Iron Range Ry. Co.,
Deerwood, Minn. '05
*Adams, George I.....Prof. Geol., Pei Yang University, Tientsin, China. '01
*Adams, Harry C., Vice-Prest., Westmoreland Coal Co.,
224 So. Third St., Philadelphia, Pa. '03
*Adams, Henry, Min. Engr., Genl. Mgr.,
Rush Creek Placer Mining Co., Ltd., Quincy, Plumas Co., Cal. '02
*Adams, Huntington, Min. Engr.....Gante 8, Mexico City, Mexico. '03
**Adams, John C., Min. Engr., Asst. Genl. Supt. of Mines,
Anaconda Copper Mining Co., Butte, Mont. '06
*Adams, Mason T., Min. Engr.....45 Broadway, New York, N. Y. '02
*Adams, Ralph E., Asst. Supt., Velardena Unit, Am. Smelters Securities Co.,
Velardena, Dur., Mexico. '06
*Adams, Thomas J.....Rahway, N. J. '02
*Adams, Walter C., Min. Engr.....Apartado 1, Durango, Dur., Mexico. '99
*Addicks, Lawrence.....Chrome, N. J. '02
*Addie, Robert, Min. Engr. and Met.,
Suffolk House, Laurence Pountney Hill, London, E. C., England. '98
*Aertsen, Guilliaem, Midvale Steel Co., P. O. Box 1606, Philadelphia, Pa. '88
*Agabeg, Edgar C., Cons. Min. Engr.,
Panuria P. O., via Sitarampore, E. I. Ry., Bengal, India. '05
*Agnew, Frank Vans, Assayer, Care P. A. Vans Agnew, Kissimmee, Fla. '04
††Agnew, George B.....22 William St., New York, N. Y. '03
*Agnew, James C., Asst. Mgr., Mahoning Ore & Steel Co., Hibbing, Minn. '04
*Agnew, John A., Min. Engr., Care Union Bank of Australia, Ltd.
London, E. C., England. '09
*Agnew, William C.....1925 E. 1st St., Duluth, Minn. '00

*Aguilar, Ponciano, Min. Engr.....Sopeña 13, Guanajuato, Mexico. '01
**Aguilera, Pedro, Cons. Engr.....Santiago de Cuba, Cuba. '05
*Ahbe, Frederic R., Min. Engr.....Athens, Pa. '97
*Ahlers, Rudolph O., Min. Engr., Norfolk House,
Lawrence Pountney Hill, London, E. C., Eng. '99
*Ahles, Robert L.....Sweets Steel Co., Williamsport, Pa. '02
Åkerman, Prof. Richard.....34 Kungsgatan, Stockholm, Sweden.
*Alatorre, Rafael F., Mine Mgr., 3a Calle de Matamoras No. 5,
Pachuca, Hidalgo, Mexico. '04
*Aldasoro, Andrés, Min. Engr., Genl. Mgr., Dos Estrellas Min. Co.,
P. O. Box 34, El Oro, Mexico. '02
*Alden, Herbert W.....Mech. Engr., 33 Warren Ave. E., Detroit, Mich. '12
*Alderman, Samuel J., Genl. Mgr., Indian Queen and Blind Spring
Hill Mines, Benton, Cal. '07
*Aldrich, Truman H., Postmaster.....Birmingham, Ala. '78
*Aldrich, Truman H., Jr., Min. Engr. and Coal Operator,
Aldrich Mining Co., 615 Brown-Marx Bldg., Birmingham, Ala. '96
*Aldridge, Walter H.....14 Wall St., New York, N. Y. '89
*Alexander, Curtis, Met. .....Apartadó 320, San Luis Potosi, Mexico. '84
*Allan, John F., Cons. Engr...62 London Wall, London, E. C., England. '90
**Allan, Thomas A., Care Fergus Allan, Mexico Mines of El Oro, Ltd.,
Apartado 17, El Oro, Mex., Mexico. '95
*Allderdice, Taylor, 3d Vice-Prest., National Tube Co.,
1711 Frick Bldg., Pittsburg, Pa. '92
*Allen, Anson W.....1616 So. 14th Ave., Birmingham, Ala. '87
*Allen, John A., Mgr., Minas del Castaño, Castaño Nuevo,
Prov. of San Juan, Argentine Republic, So. America. '07
*Allen, John H., Met.....Knox & Allen, 82 Beaver St., New York, N. Y. '84
*Allen, Robert, Met., Cons. Goldfields of S. A., Ltd.,
P. O. Box 975, Johannesburg, Transvaal, So. Africa. '98
*Allen, Roy H., Min. Engr., Mgr., Sierra Plata Mining Co.,
Villa Escobedo, Chih., Mexico. '09
*Allen, Walter W., Cons. Engr... .....42 Broadway, New York, N. Y. '86
*Allison, Robert, Retired Mfr. Mining Machinery.....Port Carbon, Pa. '86
*Almy, William F., Min. Engr..... P. O. Box 123, Nashua, N. H. '80
*Althouse, Harry W., Min. Engr.....Pottsville, Pa. '02
*Ambrosius, Carl E., Mining.....La Presa 79, Guanajuato, Mexico. '99
*Ambrosius, Julius R., Mining.....Aparatado 11, Guanajuato, Mexico. '99
*Ammon, Mark A., Met. Engr., The Willys-Overland Co.....Toledo, Ohio. '12
*Amsden, Frank F., Mgr., Federal Furnace Co., East Side Sta., Chicago, Ill. '87
*Amsden, Otto B., Min. Engr.....325 E. Iliff Ave., Denver, Colo. '93
**Amy, Ernest J. H., Banker, H. Amy & Co., 44 Wall St., New York, N. Y. '85
*Anderson, Albert J., Min. Engr.....Socorro Mines, Mogollon, N. M. '03
*Anderson, Alexander, Min. Engr.,
27 Inverleith Row, Edinburgh, Scotland. '07
*Anderson, Axel E., Min. Engr., E. I. Du Pont de Nemours Pdr. Co.,
Central Savings Bank Bldg., Denver, Colo. '04
*Anderson, Frank, Min. Engr., U. S. Deputy Mineral Surveyor, Utah
and Nevada, 468 South 12th East St., Salt Lake City, Utah. '96
*Anderson, J. K., Civ., Min. Engr., Anderson & Schofield,
Williamson, W. Va. '99

*Anderson, James S., Chem., Care A. I. Barlow, Launox, Victoria Rd., Eccles, Manchester, England. '08
*Anderson, Martin L., Mine Foreman.....Långlöt, Sweden. '02
*Anderson, Robert Hay, Min. Engr....Apartado 866, Mexico City, Mex. '95
*Anderson, William G.....2255 Filmore St., San Francisco, Cal. '09
**Andrew, Thomas, Min. Engr.....Rand Club, Johannesburg, So. Africa. '94
*Andrews, Charles W., Treas., Zenith Furnace Co.....Duluth, Minn. '13
**Antz, Eugene, Met.....Homestead, Ore. '99
*Apgar, Frederick W., Min. Geol.....Canonbury Road, Jamaica, N. Y. '11
*Aplin, William, Met. Assayer, Instructor Chem., Moonta School of Mines, Moonta, So. Aust. '08
*Appleby, William R., Dean, Minnesota School of Mines; Prof. of Met., State University, Minneapolis, Minn. '90
†Applegren, John O. W., Engr., Loope, via Markleeville, Alpine Co., Cal. '09
*Archbald, Hugh, Min. Engr.....236 Monroe Ave., Scranton, Pa. '11
*Archbald, James, Jr., Engr. & Agent, Girard Estate, 405 Thompson Bldg., Pottsville, Pa. '08
**Argall, Joseph, Min. Engr., Iron Mast Mine, Kamloops, B. C., Canada. '03
*Argall, Philip, Min. Engr. and Met., 1st Nat. Bank Bldg., Denver, Colo. '92
*Arkell, Harry J., Mining, 29 Clapham Mansions, Nightingale Lane, London, S. W., England. '08
*Armas, Miltiades Th., Cons. Min. Engr., Care Louis Moré, 2 Rue de la Verrerie 2, Paris, France. '96
*Armstead, Daniel McP., Ingersoll-Rand Co., Farmers Bank Bldg., Pittsburg, Pa. '09
**Armstead, Henry H., Cons. Engr., Prest. Mexican United Co., 29 Broadway, New York, N. Y. '00
*Armstrong, John O., Genl. Mine Mgr., Lloyd Copper Co., Ltd., Burraga, New South Wales, Australia. '94
*Armstrong, Lyndon K., Min. Engr...P. O. Drawer 2154, Spokane, Wash. '07
*Armstrong, Richard E., Min. Engr.....Address wanted. '10
*Armstrong, Thomas, Chief Mineral Draftsman and Computer, Care Surveyor General, Phœnix, Ariz. '95
*Arnold, Charles E. Le N., Min. Engr., Inspiration Copper Co., Miami, Ariz. '06
*Arnold, Leo F., Min. Engr.....719a Quincy St., Brooklyn, N. Y. '05
*Arnold, Ralph, Cons. Geol. and Engr., Union Oil Co., Los Angeles, Cal. '12
*Arozarena, Rafael M. de.....7a Chihuahua 168, Mexico City, Mexico. '98
*Arthur, Edward P., Jr.....Bi-Metallic Bank, Cripple Creek, Colo. '97
*Ashley, George H., Geol., U. S. Geological Survey, Washington, D. C. '99
*Ashley, H. H.....164 South River St., Wilkes-Barre, Pa. '94
*Ashmore, Ernest P., Cons. Min., Met. Engr., P. O. Box 531, So. Porcupine, Ont., Canada. '00
**Ashmore, G. Percy, Cons. Min. Engr., 109 Lansdowne Pl., Hove, Sussex, England. '97
**Ashton, Frank, Min. Engr., Care N. J. Manson, City Hall, San Francisco, Cal. '00
*Astley, John W., Cons. Min. Engr., 24 King St., W., Toronto, Ont., Can. '91
*Atha, Benjamin, Prest., Benj. Atha Co. (Crucible Steel Co. of America), Newark, N. J. '84

**ATHERTON, T. W. T., Chief Min. Engr., Ivory Coast Min. Corp., 62 London Wall, London, E. C., England. '92
*ATKIN, AUSTIN J. R., Min. Engr., Met., P. O. Box 6231, Johannesburg, Transvaal, South Africa. '06
*ATKINSON, LOUIS W., Prest., Mgr., St. Clair Colliery Co.....Eagle, W. Va. '94
*ATKINSON, ROBERT C., Mech. Engr., H. Eckstein & Co., Box 149, Johannesburg, Transvaal, South Africa. '06
*ATWATER, CHRISTOPHER G., Care The United Coke & Gas Co., 17 Battery Place, New York, N. Y. '03
*ATWATER, RICHARD M., JR., Min. Engr., Ladenberg, Thalmann & Co., 25 Broad St., New York, N. Y. '97
*AUBURY, LEWIS E., Min. Engr..... .....Easton, Cal. '00
*AUER, CHARLES I., Assayer, Chem., Estacion de Pedriceña, Dur., Mexico. '04
*AUSTIN, ALBERT M., Messimer & Austin, 55 Liberty St., New York, N. Y. '05
*AUSTIN, EDWIN A., Min. Engr., Yukon Gold Co.....Iditarod, Alaska '08
*AUSTIN, JOHN F., Met.....Apartado 101, Monterey, N. L., Mexico. '10
**AUSTIN, KENNETH, Cons. Min., Met. and Mech. Engr., P. O. Box 4305, Johannesburg, Transvaal, South Africa. '97
*AUSTIN, LEONARD S., Prof. of Met., 251 West 2d North St., Salt Lake City, Utah. '94
*AUSTIN, W. LAWRENCE.....P. O. Box 1061, Riverside, Cal. '82
*AVERY, JOHN, Met.....Magill, Adelaide, So. Australia. '03
*AYERS, FREDERIC G.....16 Weymouth St., Adelaide, South Australia. '98
†AYRES, EMMA L. C.....Bound Brook, N. J. '03
*AYRES, W. S., Min. and Mech. Engr.....Hazleton, Pa. '73
*AYTON, ERNEST F.....Apartado 16, Guanacevi, Durango, Mexico. '95

*BABB, PERCY A., Min. Engr., Ave. Cinco de Mayo No. 32, Mexico City, Mexico. '06
*BABBITT, THOMAS D., Min. Engr.....Nampa, Canyon Co., Idaho. '99
*BACHE, FRANKLIN, Min. Engr., Prest., McAlester Coal Co., Fort Smith, Ark., and 505 Land Title Bldg., Philadelphia, Pa. '91
*BACHERT, AUGUSTUS E., Civ., Min. Engr. .....Tyrone, Blair Co., Pa. '08
*BACKUS, GEORGE S., Min. Engr..... Elk City, Idaho. '07
*BACORN, FREDERICK W., Atty., Prest., Cable Lease Min. Co., Butte, Mont. '03
*BADLAM, STEPHEN, Asst. Supt., Merchant Mill Dept., Pittsburgh Crucible Steel Co., Midland, Pa. '99
*BAER, GEORGE F., Prest., Philadelphia & Reading Railway Co., Reading Terminal, Philadelphia, Pa. '92
*BAGG, RUFUS M., JR., Prof. Geol. and Mineralogy, Laurence College, Appleton, Wis. '07
**BAGGALEY, RALPH, Mfr. and Miner, Prest., Puritan Coke Co., 5th Ave. and Woodland Rd., Pittsburg, Pa. '00
*BAGGE, NILS O.....Room 1511, 19 Cedar St., New York, N. Y. '02
*BAHNEY, LUTHER W., Met..... .....Yale Station, New Haven, Conn. '08
*BAILEY, A. C., Min. Engr.....P. O. Box 751, Cobalt, Ont., Canada. '11
*BAILEY, CHARLES, Treas., Reliance Tube Co., Arrott Bldg., Pittsburg, Pa. '86
*BAILEY, J. TROWBRIDGE, Min. Engr.....32 W. 40th St., New York, N. Y. '02
**BAILEY, JAMES B., Genl. Mgr., Central Iron & Steel Co., Harrisburg, Pa. '00
*BAILEY, MELBOURNE, Min. Engr.....Barkerville, B. C., Can. '05
*BAILIE, ROBERT L., Mining.....32 Warren Ave. E., Detroit, Mich. '10

*Baillie, Frank S., Vice-Prest. and Genl. Mgr.,
Columbia Gold Mining Co., Columbia Mine, Sumpter, Ore. '03
*Bain, H. Foster, Editor, *Mining and Scientific Press*,
420 Market St., San Francisco, Cal. '97
**Bain, Hugh A.....Riverside, Cal. '00
*Baird, Dudley, Met.....2436 Prospect Ave., Berkeley, Cal. '02
*Baird, George A., Mining, 1430 Corn Exchange Bk. Bldg., Chicago, Ill. '06
*Baird, Henry J. B.....West Chester, Pa. '03
*Baird, Louis, Min. Engr., Hidalgo 1360 (Altos), Guadalajara, Jal., Mexico. '09
*Baker, Charles J. S., Civ. Engr., Met., 15 Eldon Rd.,
Kensington, London, W., England. '08
*Baker, C. O., Prest., Baker & Co.....30 Church Street, New York, N. Y. '95
*Baker, David, Met. Engr..... .....1011 Chestnut St., Philadelphia, Pa. '86
*Baker, Hugh C., Engr., King Cons. Co.....No. Tonawanda, N. Y. '07
*Baldwin, William S., Min. Engr.....170 South Broadway, Nyack, N. Y. '06
*Balfour, J. Fordyce, Min. Engr.,
Eversley, Portebello, Edinburgh, Scotland. '04
*Ball, Sydney H..... .....71 Broadway, New York, N. Y. '07
*Balta, José, Ingeniero de Minas...Mogollon 13, Lima, Peru, So. America. '02
*Bancroft, George J., Min. Engr.....222 McPhee Bldg., Denver, Colo. '98
*Bancroft, Howland, Min. Geol.....730 Symes Bldg., Denver, Colo. '09
*Banks, Edwin G., Met.....P. O. Box 28, Waihi, Auckland, N. Z. '00
*Banks, Harry P., Chem.....Camp 2, Big Creek P. O., Cal. '08
*Banks, John H., Min. Engr. and Chem., Ricketts & Banks,
80 Maiden Lane, New York, N. Y. '83
*Banks, Noble C., Min. and Met. Engr.,
Care Gear Grinding Mach. Co., Boulevard & Chene Sts., Detroit, Mich. '97
**Banon, Henry C., Min. Engr., P. O. Box 144, Chemainus,
Vancouver Isd., B. C., Canada. '90
*Barager, George W., Gen. Mgr., Pardee Bros. & Co., Inc.,
Lattimer Mines, Pa. '12
**Barber, George Marriot, Min., Met. Engr., 42 Clapham Road,
Bedford, England. '02
*Barber, John C., Mine Supt.....Ketchikan, Alaska. '05
*Barbour, Percy E., Min. Engr., Mgr., Uwarra Mining Co., Candor, N. C. '03
**Barbour, Thomas J., Min., Mech. Engr., 111 Broadway, New York, N. Y. '97
*Barclay, Thomas H.....Casilla 447, Santiago, Chile, South America. '00
*Bard, Darsie C., Min. Engr., Montana State School of Mines, Butte, Mont. '05
*Bardwell, Alonzo F., Min. Engr., Successor to Bettles, Mathez & Co.,
158 S. W. Temple St., Salt Lake City, Utah. '89
*Barker, George, Mine Mgr.....Rosebery, Tasmania. '11
*Barker, Henry A., Met. Engr., 315 Edificio Bancario,
Ave. Cinco de Mayo No. 32, Mexico City, Mexico. '02
*Barker, Samuel, Jr., Civ., Min. Engr., Barker & Wilson...Butte, Mont. '00
*Barlow, Alfred E., Min. Geol.,
328 Roslyn Ave., Westmont, Que., Canada. '12
*Barnard, Enoch A., Asst. in Testing Dept., Washoe Reduction Wks.,
Anaconda Copper Mining Co., P. O. Box 275, Anaconda, Mont. '12
*Barnes, Walter A., Min. Engr., Utah Metal Mining Co....Tooele, Utah. '12
*Barnett, Maurice.....11 Pine St., New York, N. Y. '93
**Barnett, William J., Cons. Min. Engr.,
3 London Wall Bldgs., London Wall, London, E. C., England. '02

*Barney, Montagu T., Min. Engr., Aukobra Development Co., 155 Fenchurch St., London, E. C., England. '01
*Barnhart, G. H., Min. Engr., Prest. and Genl. Mgr., Torpedo-Eclipse Mining Co., P. O. Box 1012, Ouray, Colo. '93
†Barnum, W. Eugene, Supt. Blaisdell Coscotitlan Synd., Apartado 92, Pachuca, Hid., Mexico. '12
*Barratt, Sydney A.....P. O. Box 148, Pleasantville, N. Y. '12
*Barrell, Robert W., Cons. Min. Engr. and Met., Asst. Mgr., St. Louis Sampling & Testing Works, 713 Clark St., St. Louis, Mo. '99
*Barren, Henry A.....181 E. 93d St., Cleveland, Ohio. '02
*Barringer, Daniel M., Min. Engr., Geol., Bullitt Bldg., Philadelphia, Pa. '90
*Barron, George D.....P. O. Box 596, Rye, N. Y. '01
*Barrows, Walter A., Jr.....Brainerd, Minn. '90
*Barry, John, Mine Supt.....Silverton, Colo. '09
*Bartlett, Albert B., Min. Engr.....220 W. 19th St., Cheyenne, Wyo. '07
*Bartlett, James H....Mng. Dir., American Assn., Inc., Middlesboro, Ky. '85
*Bartlett, John R., Min. Engr., Red Metal Mining Co., 553 Phœnix Bldg., Butte, Mont. '06
†Bartlett, William S., Secy. to Public Companies, 80 Bishopsgate, London, E. C., England. '07
*Bartol, George, Genl. Mgr., The Otis Steel Co., Ltd.....Cleveland, Ohio. '79
*Bassett, William H., Met.....American Brass Co., Waterbury, Conn. '92
*Bassler, Harvey, Teacher.....1421 McCulloh St., Baltimore, Md. '08
*Batchelder, Joseph F.....Hood River, Ore. '00
*Batcheller, Henry R., Cons. Min. Engr.....Box 21, Washington, N. H. '95
**Batcheller, James H., Min. Engr., Care Tomboy Gold Mines, Ltd., Smuggler, Colo. '00
*Batchelor, Owen S., Mining.....P. O. Box 221, Kamloops, B. C., Canada. '99
*Bates, Mowry, Min. Engr.....27 William St., New York, N. Y. '07
*Bateson, Charles E. W., Min. Engr., Chem., 43 E. 58th St., New York, N. Y. '01
*Batz, Baron René de, Cons. Engr.....2 Ave. Camoëns, Paris, France. '95
*Baumann, Albert P., Min. Engr.....228 East 52d St., New York, N. Y. '99
*Baumgarten, K., Min. Engr.....616 Tinken Bldg., San Diego, Cal. '05
*Baxter, Charles H., Supt., Loretto Iron Co., Loretto, Mich..... '12
*Baxter, Francis K., Jr., Min. Engr. and Chem.....Address wanted. '04
*Bayles, Frederick P., Min. Engr. .....Cokedale, Colo. '97
*Bayles, James C., Cons. Engr.....529 East Ave , Easton, Pa. '07
**Bayliss, Rawlinson T., Min. Engr., Chairman, Exploration Co., Ltd., 11 Cornhill, London, E. C., England. '89
*Beal, Latham O.....Dunedin, New Zealand. '98
*Beale, Addison H.....Vandergrift, Pa. '01
**Beale, Horace A., Jr., Iron Mfr.....Parkesburg, Pa. '08
*Beall, Albert S. E.....P. O. Box 126, Hollywood, Cal. '06
*Beall, Clarence A., Mine Mgr.....P. O. Box 126, Hollywood, Cal. '06
*Beals, Roger L., Min. Engr., Minas del Tajo, Rosario, Sinaloa, Mexico. '07
*Beard, James T., Civ., Min. Engr., Senior Asso. Editor, *Coal Age*, 505 Pearl St., New York, N. Y. '06
*Beatty, A. Chester, Cons. Engr.....71 Broadway, New York, N. Y. '96
*Beck, Edwin L., Assayer.....Carrville, Cal. '04
*Beck, Erich Alfred, Met., Goldschmidt Thermit Co., 90 West St., New York, N. Y. '12

Beck, Prof. Richard.....Freiberg, Saxony, Germany.
*Becker, George F., Geol.....U. S. Geological Survey, Washington, D. C. '93
*Beckett, James A.....Hoosick Falls, N. Y. '97
*Beckwith, Henry T., Field Geol., P. O. Box 95,
Stanford University, Cal. '09
*Bedford, Robert H., Min. Engr., North Star Mines...Grass Valley, Cal. '12
*Beeken, Lewis L., Supt., Experimental Dept., Jones & Laughlin
Steel Co., Eliza Furnace, Pittsburg, Pa. '11
*Beeler, Henry C., Min. Engr., First National Bank Bldg., Denver, Colo. '04
*Behr, Hans C., Cons. Mech. Engr., Gold Fields American Development
Co., Ltd., 71 Broadway, New York, N. Y. '00
*Bel, J. Marc, Expert pres le Conseil de Prefecture de la Seine,
90 Rue d'Amsterdam, Paris, France. '84
*Belden, Sanford B., Mgr. Min. Dept., The Jeffrey Manufacturing Co.,
Columbus, Ohio. '01
*Belin, Henry, Jr., Powder Mfr., Traders Nat. Bank Bldg., Scranton, Pa. '87
*Bell, Alan D., Min. Engr., St. Joseph Lead Co.....Bonne Terre, Mo. '95
*Bell, Charles N., Min. Engr., First National Bank Bldg., Telluride, Colo. '09
†Bell, Frank R., Min. Engr. and Chem..... .....Bartlesville, Okla. '03
*Bell, Sir Hugh, Ironmaster....Rounton Grange, Northallerton, England. '07
*Bell, J. Mackintosh..... .....Almonte, Ont., Canada. '02
**Bell, John W., Asst. Prof. Min. Engrg,
McGill Univ., Montreal, Canada. '99
*Bell, Dr. Robert.....136 McLaren St., Ottawa, Ont., Canada. '85
*Bell, Robert N., State Inspector of Mines.....Boise, Idaho. '04
*Bell, William L., Min. Engr., Supt., Smelter, B. C. Copper Co.,
Greenwood, B. C., Canada. '12
*Bellinger, Hermann C., Met., Great Cobar, Ltd.,
Cobar, N. S. W., Australia. '91
*Bellinger, H. P., Solvay Process Co., 1902 W. Genesee St., Syracuse, N. Y. '89
*Bement, A., Cons. Min., Mech. Engr.....206 So. La Salle St., Chicago, Ill. '03
*Benedict, William de L., Cons. Min. Engr., 19 Cedar St., New York, N. Y. '83
*Benjamin, Edward H., Min. Engr.....805 Linden St., Oakland, Cal. '99
*Bennett, Arthur F., Cons. Min. Engr.....2 Rector St., New York, N. Y. '12
†Bennett, Russell M., Iron and Mineral Lands, 710–718 New Security
Bank Bldg., 2d Ave. South and 4th St., Minneapolis, Minn. '95
*Benson, Alexander J., Cons. and Min. Engr.....Grosseto, Toscana, Italy. '90
*Bent, Quincy, Asst. to Prest., Maryland Steel Co.....Sparrows Point, Md. '12
*Bentley, Robert, Genl. Mgr., Ohio Iron & Steel Co., Lowellville, Ohio. '84
*Bentley, Thomas H., Min. & Civ. Engr.,
603 Blake-McFall Bldg., Portland, Ore. '09
†Berg, Haakon A., Asst. Supt., Carnegie Steel Co.....Rankin, Pa. '09
*Berg, P. T., Mech. Engr.....No. 1 Strandvägen, Stockholm, Sweden. '90
†Bergen, Raymond C., Student.....60 Park St., Brookline, Mass. '13
*Berger, W. F. B., Min. Engr.....825 Symes Bldg., Denver, Colo. '07
*Berkey, Charles P., Instructor Geol., Columbia Univ., New York, N. Y. '08
*Berray, Niles S.....725 Magnolia Ave., Long Beach, Cal. '99
*Berry, Edwin S., Min. Engr., Room 1714, 165 Broadway, New York, N.Y. '07
**Berry, J. F., Cons. Mech. Engr., 10 Miller St., Port Elizabeth,
Cape Colony, So. Africa. '93
**Besley, James C., Min. Engr....Apartado 31, Magdalena, Son., Mexico. '09
*Best, William N., Engr. in Caloric.....11 Broadway, New York, N. Y. '12

*Betts, Anson G., Chem. and Met.,
Laurel River Logging Co., Stackhouse, N. C. '01
*Bevington, Richard G., Mill Mgr., Village Main Reef Gold
Mining Co., Ltd., Box 1091, Johannesburg, Transvaal, South Africa. '06
*Beyer, Samuel W., Prof.Geol., Min. Engr., Iowa State College, Ames, Iowa. '98
*Bible, Joseph W., Mine Mgr. and Engr.....Silver City, N. M. '05
*Bilharz, Oscar M., Min. Engr., Supt., Doe Run Lead Co., Flat River, Mo. '92
*Billin, Charles E., Mfr. Machinery, American Engineering Works,
2632 Lake View Ave., Chicago, Ill. '75
*Billings, G. H., Met. Engr.....393 Dorchester Ave., Boston, Mass. '77
*Binford, Charles M., Civ., Min. Engr., Piney Min. Co., Stanaford,
W. Va. '11
*Birch, Stephen, Min. Engr.....165 Broadway, New York, N. Y. '06
*Bird, Robert Macdonald, Min. Engr., Messrs. S. Pearson & Son, Ltd.,
47 Parliament St., Westminster, London, E. C., England. '97
*Bird, Robert Montgomery.....220 Wall St., Bethlehem, Pa. '05
*Birkinbine, John, Cons. Engr....Odd Fellows' Temple, Philadelphia, Pa. '75
*Birkinbine, John L. W.....Parkway Bldg., Philadelphia, Pa. '07
*Bishop, Roy N., Min. Engr., Alaska-Commercial Bldg., San Francisco, Cal. '02
*Black, J. Ferguson, Mining.....Box 257, Sudbury, Ont., Can. '08
*Black, Robert M., Asst. Prof. of Mining, University of Pittsburg,
Pittsburg, Pa. '09
*Black, Robert S., Min. Engr., Genl. Mgr.,
The Kalgurli Gold Mines, Ltd., Fimiston, West. Australia. '98
*Blackburn, Harry H., Min. Engr.,
Fire Creek Coal & Coke Co., Fire Creek, W. Va. '07
*Blackburn, William H., Supt.....Tonopah Mining Co., Tonopah, Nev. '06
*Blackmar, Frank H., Min. Engr., Doña Maria M. & M. Co.,
Banco, Rio Magdalena, via Barranquilla, Colombia, So. America. '10
*Blackmer, William D., Min. Engr., University Club, Los Angeles, Cal. '07
*Blackstone, Richard, Chief Engr., Homestake Mining Co.....Lead, S. D. '90
*Blackwell, Francis O., Cons. Engr.....49 Wall St., New York, N. Y. '92
*Blair, Allen F., Blair, Wakeling & Rice,
805 Lowman Bldg., Seattle, Wash. '06
*Blair, Andrew A., Anal. Chem., Booth, Garrett & Blair,
406 Locust St., Philadelphia, Pa. '75
*Blake, D. E., Min. Engr.....1029 Corona St., Denver, Colo. '08
*Blake, Edwin T.....2233 Piedmont Way, Berkeley, Cal. '03
**Blake, Francis H., Min. Engr., Falcon's Flight Farm, Litchfield, Conn. '84
**Blakemore, George H., Genl. Mgr., Gt. Cobar, Ltd.,
Cobar, N. S. W., Aust. '97
*Blakeslee, Frank A., Care Taquah Min. & Exploration Co., Ltd.,
Tarkwa, Gold Coast, West Africa. '97
*Blandy, S. H. B., Min. Engr.,
35 Queen Victoria St., London, E. C., England. '02
*Blauvelt, Harrington, Min. Engr. and Met., Supt., Cash Mine Co.,
Prescott, Ariz. '89
*Blauvelt, William H.....1917 West Genesee St., Syracuse, N. Y. '87
*Bleeck, Alfred W. G., Geol.....P. O. Box 441, Rangoon, Birma. '10
*Bliss, Collins P., Prof. Mech. Engineering, New York Univ.,
University Heights, New York, N. Y. '97
*Block, H. W. C.....1804 Warren St., St. Louis, Mo. '86

*Blomfield, Alfred L., Met., Golden Cycle Mining Co., Colorado Springs, Colo. '05
*Blood, George Deroy, Min. Engr.....Instructed to hold all mail. '93
*Blow, A. A., Cons. Engr.... .....Ware Neck P. O., Gloucester Co., Va. '82
**Blow, John J., Min. Engr.....172 Rodney St., Brooklyn, N. Y. '04
*Blumenau, Hermann, Min. Engr., Landhausstrasse 48, Berlin, Wilmersdorf, Germany. '07
*Boalich, Edwin S., Statistician, California State Mining Bureau, Ferry Bldg., San Francisco, Cal. '10
*Boddington, Henry D., Met. Chem., Royal Colonial Inst., London, W. C., England. '06
*Bodfish, Frederick V., 1011 Newhouse Bldg., Salt Lake City, Utah. '01
*Body, J. Francis, Min. Engr.....Address wanted. '07
*Bohn, Charles A., Min. Engr., Care Am. Smltg. & Refg. Co., 165 Broadway, New York, N. Y. '93
*Boileau, John W., Cons. Engr.....607 Park Bldg., Pittsburg, Pa. '10
*Boker, Heinrich G., Steel Engr., Technical Director of the Bergische Stahl Industrie, Remscheid, Germany. '07
*Bolles, J. H.....114 W. 79th St., New York, N. Y. '92
*Bolles, Myrick N., Chem., Care American Smelting & Refining Co., Apartado 101, Monterey, Nuevo Leon, Mexico. '03
*Bond, Josiah, Mining.....Toluachi Mine, Alto, Ariz. '03
*Bone, Albert J., Smelter Supt.....Tenn. Copper Co., Copperhill, Tenn. '08
*Bonillas, Ygnacio, Min., Civ. Engr.....Box 154, Nogales, Ariz. '91
*Bonnyman, James, Prest., Bonnyman Norman C. & I. Co., 907 Brown-Marx Bldg., Birmingham, Ala. '12
*Bonzano, Adolphus, Civ. and Mech. Engr., Prest., Bonzano Rail Joint Co., 22 So. Fifteenth St., Philadelphia, Pa. '86
**Booraem, Robert E., Min. Engr.....Union Club, New York, N. Y. '87
*Booth, Harry M., Expert Miner, U. S. Forest Service, Majestic Bldg., Denver, Colo. '10
*Borchers, Dr. Wilhelm, Prof. of Met., Rektor of the Royal College of Technology, Aachen, Germany. '01
*Bordeaux, Albert F. J., Min. Engr., Care Bryner, Kousnetzoff & Co., Vladivostok, Siberia. '04
*Borden, Gideon S., Chief Engr., New River and Pocahontas Cons. Coal Co., Charleston, W. Va. '02
*Borie, Adolph E., Vice-Prest., Taylor Iron & Steel Co., 100 Broadway, New York, N. Y. '11
*Borowsky, Abraham G., Secy. and Mgr., Atco Metal Mfg. Co., Atco, N. J. '12
*Borrow, Frank K., Min. Engr., Care Hyde, Tandy, Mahon & Sayer, 33 Ely Place, Holborn, London, E. C., England. '01
**Boschen, William C., Min. Engr.....1 West 89th St., New York, N. Y. '05
*Bosco, Francis W., Met. Engr...1834 South Sherman Ave., Denver, Colo. '02
*Bosqui, Francis L., Met. Engr., Care H. Eckstein & Co., Johannesburg, Transvaal, So. Africa. '97
*Bossuat, Henry, Genl. Mgr., Dos Estrellas Mine, Apartado 34, El Oro, Mex., Mexico. '06
*Bostwick, Fred. H., Genl. Westn. Mgr., Wellman-Seaver-Morgan Co., 611 Ideal Bldg., Denver, Colo. '09
*Bostwick, William A., Vice-Prest. and Genl. Mgr. of Sales, Orford Copper Co., 43 Exchange Pl., New York, N. Y. '05

*Botsford, Robert S., Min. Engr., Nicolaevo Povdinsk Estate, Kyshtim, Vyia Sta., Bogoslovsk R. T., Govt. of Perm, Russia. '05
*Bottomley, H., Inspector of Mines...Krugersdorp, Transvaal, So. Africa. '02
**Boucher, Arthur S., Min. and Civ. Engr., Sharpcliffe Hall, Ipstones, Staffordshire, England. '94
*Bouery, Pierre, Min. Engr., Mgr. Lagrange Min. Co., Weaverville, Cal. '06
*Bourdariat, Alexander J., Engr.....Tananarive, Madagascar. '06
*Boutwell, John M., Min. Geol.....Santa Barbara, Cal. '04
*Bowen, David, Prof. of Mining.....University of Leeds, Leeds, England. '11
*Bowen, Herbert P., Min. Engr., Assayer, Surveyor.....Miami, Ariz. '04
*Bower, Charles P., Civ. Engr.....520 Walnut St., Reading, Pa. '94
*Bowie, Alexander.....Bowie, Colo. '02
*Bowler, Robert P., Prest., Guantanamo Exploration Co., 2 Rector St., New York, N. Y. '11
*Bowman, Charles H., Prest., Montana State School of Mines, 1020 Caledonia St., Butte, Mont. '06
*Bowman, Francis C., Min. Engr., Met.....Trojan, S. D. '07
*Bowron, James.....1401 So. Twentieth St., Birmingham, Ala. '78
*Bowron, William M., Cons. Engr., Care *The Tradesman*, Chattanooga, Tenn. '05
*Boyd, Adam A., Mine Mgr., Mount Morgan Gold Mines Co., Ltd., Mount Morgan, Queensland, Australia. '09
*Boyd, Albert H., Engr., Denver Rock Drill & Machinery Co., 1415 18th St., Denver, Colo. '09
*Boyd, Augustus W., Min. Engr.....519 Madison Ave., Spokane, Wash. '01
†Boyd, Frederick J.....Apartado 176, Guadalajara, Jalisco, Mexico. '02
*Boyd, Horace, Furnace Supt., Thomas Iron Co.....Hokendauqua, Pa. '06
*Boyd, John Y., Prest., Tyrone Iron Co.....222 Market St., Harrisburg, Pa. '86
*Boyd, William S., Min. Engr., Asst. Supt., Ray Cons. Copper Co., Ray, Ariz. '02
*Boyle, Emmet D.....Virginia City, Nev. '03
*Boynton, A. J., Supt., Blast Furnaces, National Tube Co., 230 Third St., Elyria, Ohio. '04
*Boynton, Henry C.....Care John A. Roebling's Sons Co., Trenton, N. J. '01
*Boyt, John.....Supt., Alcohol Plant, E. I. Du Pont de Nemours Powder Co., Georgetown, S. C. '02
*Braddock, Homer F., U. S. Bureau of Mines, 40th and Butler Sts., Pittsburg, Pa. '10
*Braden, William, Cons. Min. Engr., Room 1805, 27 William St., New York, N. Y. '94
*Bradford, Robert H., Prof. Met., Univ. of Utah, Salt Lake City, Utah. '02
**Bradford, Seymour K., Civ., Min. Engr....P. O. Box 72, Palo Alto, Cal. '02
*Bradley, D. H., Jr., Min. Engr., Apartado 155, Parral, Chih., Mexico. '03
**Bradley, Frederic W., Min. Engr., Prest., Bunker Hill and Sullivan M. & C. Co., Crocker Bldg., San Francisco, Cal. '91
*Bradley, Oliver U., Min. Engr., Geol., 725 Flynn-Ames Bldg., Muskogee, Okla. '06
**Bradley, Philip R., Min. Engr., 1023 Crocker Bldg., San Francisco, Cal. '02
*Bradley, Richard J. H., Min. Engr....170 Broadway, New York, N. Y. '02
*Bradshaw, Frederick, Genl. Supt., Tonopah-Belmont Development Co., Tonopah, Nev. '02
*Brady, James, Min. Engr.....Golden, East Kootenay, B. C., Canada. '96

*Braly, Norman B., Min. Engr.....822 W. Silver St., Butte, Mont. '06
*Braman, Harry S., Supt., Blast Furn., Youngstown Sheet & Tube Co., Youngstown, Ohio. '12
**Brandes, Juan Felix, Cons. Min. Engr., 260 California St., San Francisco, Cal. '02
*Branner, John C., Prof. of Geology and Vice-Prest., Stanford Univ., Cal. '84
*Braschi, Victor M., Engr. and Contractor, Apartado 830, Mexico City, Mexico. '91
*Brassert, H. A., Supt. Blast Furn., Illinois Steel Co., South Chicago, Ill. '99
*Brayer, N. G., Asst. Supt., National Malleable Castings Co., Sharon, Pa. '10
*Brayton, Corey C., Min. Engr., Asst. Genl. Mgr., Natomas Consolidated of California, 311 California St., San Francisco, Cal. '08
*Breakell, Thomas, Min. Engr.....Brassington, near Derby, England. '05
*Breen, James.....Spokane Hotel, Spokane, Wash. '87
*Breitung, Edward N., Mine Mgr., Savings Bank Bldg., Marquette, Mich. '05
*Brendel, Robert.....Kaiser Wilhelm Str., 24, Hanover, Germany. '98
*Brennon, John C., Min. Engr., Ajuchitlan Mining & Milling Co., S. A., Apartado 53, Monterey, N. L., Mexico. '01
**Bret, Jean le.....57 Avenue D'Antin, Paris, France. '98
**Bretherton, S. E., Cons. Min. and Met. Engr., Bretherton Metallurgical Co., Mills Bldg., San Francisco, Cal. '89
*Bretherton, Walter L., Waclark Titanite Explosive Co.....Corry, Pa. '87
*Brett, Alfred J., Genl. Mgr., Crown Mines, Box 102, Johannesburg, Transvaal, So. Africa. '02
**Brewer, Arthur K., Met.....1408 Baker St., San Francisco, Cal. '97
*Brewer, Carl, Min. Engr., Cleveland Cliffs Iron Co., Ironwood, Mich. '08
†Brewer, Robert E.....Hinckley Road, Milton, Mass. '02
*Brewer, William M.....P. O. Box 701, Victoria, B. C., Canada. '93
*Bridge, Samuel D., Assayer and Chem....Apartado 50, Monterey, Mexico. '01
†Bridgman, John C., Genl. Mgr., Hazard Mfg. Co., 118 W. River St., Wilkes-Barre, Pa. '11
*Briggs, William A. J., Assayer and Surveyor, Renison Bell Tin Mine, Zeehan, Tasmania. '03
*Brigstocke, Robert W., Supt., Drummond Mines, Cobalt, Ont., Canada. '05
*Brindle, Arthur St. C., Mine Supt., 123 Pemberton Bldg., Victoria, B. C., Can. '11
**Brinell, Johan A., Chief Engr., Jernkontoret.....Stockholm, Sweden. '98
*Brinker, Arthur C., Min. Engr., Buena Tierra Mining Co., Santa Eulalia, Chih., Mexico. '01
**Brinsmade, Robert B., Cons. Engr.....Apartado 185, Puebla, Mexico. '99
**Britt, Richard H.....Mogollon, N. M. '98
**Britten, Thomas J.....Box 494, Johannesburg, Transvaal, So. Africa. '95
*Brock, Charles, Prest., Boonton Iron and Steel Co.....Boonton, N. J. '81
*Brock, Reginald W., Geol., Geological Survey.....Ottawa, Ont., Canada. '04
*Brockunier, Samuel H., Min. Engr.....Nevada City, Cal. '00
*Broden, Albert, Supt. Blast Furn., Reading Iron Co.....Reading, Pa. '12
**Brodie, Walter M., Min. Engr. and Met., Batopilas Min. Co., 45 Broadway, New York, N. Y. '72
*Brodrick, Carlton T., Min. Geol., 62 London Wall, London, E. C., England. '11
*Bromly, Alfred H., Cons. Min. Engr., Care Taylor & Howat, Apartado 232, Mexico City, Mexico. '97

*Brooke, D. Owen.....Birdsboro, Pa. '09
**Brooke, Henry, Supt., Roanoke Coal & Coke Co.....Worth, W. Va. '03
*Brooke, Robert E., Treas., E. & G. Brooke Iron Co.....Birdsboro, Pa. '02
**Brooks, Alfred H., Geol., U. S. Geological Survey,
In charge of Alaskan Mineral Resources, Washington, D. C. '00
*Brooks, George S., Met. Engr., Mineral Point Zinc Co.....Depue, Ill. '08
*Brooks, Herbert O., Assayer.....Albuquerque, N. M. '08
*Brooks, John McM., Jr., Min. Engr.
Cinco Mines Co., Magdalena, Jal., Mexico. '04
*Brooks, John Y., Mgr.....Fanner Mfg. Co., Cleveland, Ohio. '12
*Brooks, Raymond.....Mission, Tex. '05
*Brophy, James, Mining.....Washoe, Mont. '01
*Brown, Albert L., Electro Refining Foreman,
Bagot St., Wallaroo, So. Australia. '11
*Brown, Alfred, Min. Engr.....Godfrey Terrace, Leabrook, So. Aust. '08
**Brown, Amos P., Prof. of Geology and Mineralogy,
University of Pennsylvania, Philadelphia, Pa. '88
**Brown, Archibald T., Cons. Min. Engr., 31 Queen St.,
Melbourne, Victoria, Australia. '91
*Brown, Arthur H., Met. Chem., Mgr., Hudson Bay Mine, Cobalt, Ont.,
Canada. '02
*Brown, Austin H., Min. Engr....."Walnut Grove Ranch," Willits, Cal. '92
*Brown, Charles H., Genl. Mgr., Machine, Automobile, & Const Co.,
Magdalena, N. M. '11
*Brown, Cony T., Min. Engr..... Socorro, N. M. '00
†Brown, Davenport, Min. Engr.....185 Summer St., Boston, Mass. '02
*Brown, David R. C., Mining ....Aspen, Colo. '09
*Brown, Donald C., Asst. Genl. Mgr., Compania Metalurgica Mexicana,
Apartado 132, San Luis Potosi, Mexico. '01
*Brown, Douglas P., Min. Engr., The Old House, Sowerby,
Thirsk, England. '03
*Brown, Edward W., Vice-Prest., Sterling Salt Co.,
29 Broadway, New York, N. Y. '06
*Brown, Elwin F.....Genl. Mgr., Pewabic Co., Iron Mountain, Mich. '91
*Brown, Frederick C.....R.F.D. 4, Boise, Idaho. '00
*Brown, George P.....P. O. Box 1200, San Diego, Cal. '06
*Brown, Gilmour E., Min. Engr., Care J. Snodgrass,
3a Finlayson Green, Singapore, Straits Settlements. '10
*Brown, Halcombe J., Vice-Prest. & Secy., Crown Gypsum Co.,
31 Main St., Buffalo, N. Y. '12
*Brown, Harvey H., Mfr., Harvey H. Brown & Co.,
2727 Euclid Ave., Cleveland, Ohio. '76
*Brown, H. Laurence, Min. Engr., 909 Harvard Blvd., Los Angeles, Cal. '07
*Brown, Harvey Scott.....Victor, Colo. '06
*Brown, John T., Asst. Supt., Duquesne Reduction Co.,
5448 Stanton Ave., Pittsburg, Pa. '07
*Brown, Joseph, Ozark Smelting & Mining Co.....Kelly, N. M. '07
*Brown, Josephus J., Jr., Min. Engr., Oklahoma School of Mines,
Wilburton, Okla. '06
*Brown, L. Blanchard, Min. Engr.....Union Club, New York, N. Y. '03
†Brown, Lewis V., Mgr.....Canaan Coal Co., Athens, Ohio. '90

*Brown, Lowell H., Iron Mining and Blast Furnace Work,
Empire Steel & Iron Co., Oxford, N. J. '10
*Brown, R. Gilman, Cons. Engr.....62 London Wall, London, E. C., Eng. '89
*Brown, Robert L., Prof. Min., Geol., Alabama Polytechnic Institute,
Box O, Auburn, Ala. '08
*Brown, Thomas E., Cons. Engr.,.....17 Battery Place, New York, N. Y. '04
*Brown, William N., Min. Engr.
Brown & Clarkson, 710 Southern Bldg., Washington, D. C. '08
*Brown, W. Sinclair, Min. Engr., Myerboun Maatschappy Ketahoen,
Lebong Soelit, Post Ketaun, Benkoelen, Sumatra, D. E. I. '94
*Browne, Arthur B., Min. Engr. and Met., 1572 Fillmore St., Denver, Colo. '93
*Browne, David H., The Canadian Copper Co., Copper Cliff, Ont., Canada. '00
*Browne, Henry L., Supt. of Mines, 1412 Willard St., San Francisco, Cal. '09
*Browne, Ross E., Min. Engr.....234 Perry St., Oakland, Cal. '94
*Browne, Spencer C., Min. Engr.....402 Edwards St., Oakland, Cal. '11
**Browning, Walter J., Min. Engr., Genl. Mgr., Rio Tinto Co., Ltd.,
Minas de Rio Tinto, Provincia de Huelva, Spain. '02
*Browning, William C., Min. Engr.,
Gunn-Thompson Co., Newhouse Bldg., Salt Lake City, Utah. '12
*Bruce, James L., Engr. of Mines.....P. O. Box 83, Joplin, Mo. '03
*Brulé, Frederick J., Civ., Min. Engr.,
Supt. Construction, Inspiration Copper Co., Miami, Ariz. '10
*Bruns, Christopher L., Jr., Min. Engr., Cuba Copper Co.,
El Cobre Mines, Santiago de Cuba, Cuba. '10
**Brunton, D. W., Cons. Engr.....Room 730 Symes Bldg., Denver, Colo. '83
**Brunton, Frederick K., Met. Engr.,
Asst. Supt., British Columbia Copper Co., Greenwood, B. C., Canada. '11
**Bryant, George W., Min. Engr..Apartado No. 86, Guanajuato, Mexico. '04
*Bryce, Robert A., Mgr., Ross Min. & Mill. Co.....Silverton, Colo. '07
*Bryden, Alexander, Min. Engr.....Dudley and 5th Sts., Dunmore, Pa. '11
*Bryden, Charles L.....1015 Myrtle St., Scranton, Pa. '04
*Buchanan, James R., Asst. Supt., Standard Cons. Mining Co., Bodie, Cal. '11
*Buchanan, Walter C., Mining and Milling,
San Luis de la Paz, Guanajuato, Mexico. '08
*Buck, Charles A., Asst. Genl. Supt., Bethlehem Steel Co.,
South Bethlehem, Pa. '06
*Buck, Stuart M., Min. Engr.....Bramwell, W. Va. '71
†Buck, Victor B., Jr.....Danbury, Conn. '98
*Budrow, Lester R., Min. Engr., Lucky Tiger Mining Co.,
Yzabal, Sonora, Mexico. '02
*Buell, Lloyd T., Min. Engr.....Miami, Ariz. '07
**Bugbee, Edward E., Asst. Prof. of Min. Engrg. and Met.,
Mass. Institute of Technology, Boston, Mass. '05
*Buhl, Frank H., Capitalist.....East State St., Sharon, Pa. '91
*Bulkley, Frank, Min. Engr.....850 Equitable Bldg., Denver, Colo. '89
*Bull, Irving C., Anal. and Cons. Chem. and Met.
Bull & Roberts, 100 Maiden Lane, New York, N. Y. '03
*Bull, Robert A., Genl. Supt., Commonwealth Steel Co., Granite City, Ill. '12
*Bullock, Laurence N. B., Met. Engr., Mexico Mine &
Smelter Supply Co., Apartado 447, Mexico City, Mexico. '07
**Bunker, Charles E....Promontorio, Estacion Chinacates, Dur., Mexico. '00
*Bunting, Douglas, Chief Engr., Lehigh & Wilkes-Barre Coal Co.,
Wilkes-Barre, Pa. '04

*Burbidge, Frederick, Min. Engr.....Paulson Bldg., Spokane, Wash. '87
†Burbidge, Theodore A., Student, Brown-Marx Bldg., Birmingham, Ala. '04
*Burch, Albert, Min. Engr., Burch, Caetani & Hershey, Crocker Bldg., San Francisco, Cal. '00
*Burch, H. Kenyon, Mech. and Met. Engr., Inspiration Cons. Copper Co., Miami, Ariz. '11
*Burcham, William D., Min. Eng.....Shafter, Tex. '12
*Burchard, Ernest F., Econ. Geol., U. S. Geol. Survey, Washington, D.C. '09
*Burchell, H. C.....Sydney, Nova Scotia, Canada. '83
†Burden, Henry, 2d., Prest., Cazenovia National Bank....Cazenovia, N. Y. '92
**Burden, H. H., Care Henry Burden, 2d.....Cazenovia, N. Y. '83
*Burger, Clarence C., Min. Engr.....71 Broadway, New York, N. Y. '97
*Burgess, John DeW., Cons. Min. Engr.....P. O. Box 747, Tucson, Ariz. '00
†Burke, M. D., Cons. Civ. Engr., 706 2d National Bank Bldg., Cincinnati, Ohio. '74
*Burkhart, Otto C., Prof. of Min. Engrg., Virginia Polytechnic Institute, Blacksburg, Va. '08
*Burley, Curtis R., Chem., Hecla Mining Co.....Gem, Idaho. '12
*Burlingame, Walter E., Assayer, Chem., 1736 Lawrence St., Denver, Colo. '01
*Burls, Herbert T., Cons. Engr., 15 Victoria St., London, S. W., England. '09
*Burnham, Mather H.....6 Broad St. Pl., London, E. C., England. '98
*Burnham, William, Prest. and Treas., The Standard Steel Works, Morris Bldg., Philadelphia, Pa. '76
*Burns, Elmer Z., Min. Engr., Simonds & Burns, 55 Liberty St., New York, N. Y. '04
*Burns, William J., Rolling Mill Supt., Singer-Nimick Works, Crucible Steel Co. of America, Pittsburg, Pa. '97
*Burns, Willis T., Genl. Foreman Electrolytic Copper Refinery, Boston and Montana Cons. Copper & Silver Mining Co., Great Falls, Mont. '03
*Burrage, William H.....581 East Couch St., Portland, Ore. '00
*Burrall, Frederick P., Min. Engr., 509 W. 121st St., New York, N. Y. '97
*Burrell, Alexander, Min. Mgr.....Chouteau, Mont. '97
*Burrows, R. H., Min. Engr.....Apartado 212, Chihuahua, Mexico. '99
**Burt, Andrew.....Elphinstone Collieries, Tranent, Scotland. '99
**Burt, Charles S.....936 S. Summit St., Iowa City, Iowa. '82
*Busey, Alfred P., Jr., Min. Engr., Mgr., Penn Mining Co., Campo Seco, Cal. '09
*Bush, B. F., Pres., Missouri Pacific, and Denver & Rio Grande R. R. Cos., St. Louis, Mo. '99
*Bush, E. Renshaw, Cons. Min. Engr.....69 Wall St., New York, N. Y. '85
*Bush, Morris W., Genl. Supt.....Woodward Iron Co., Woodward, Ala. '11
*Bushell, Benj. D., Mgr., Springs Mines, Ltd., Springs, Transvaal, S. A. '02
*Butler, John E., Supt. of Coal Mine.....Stearns, Ky. '10
*Butler, John S., Met.....Apartado 90, Guanajuato, Mexico. '06
*Butler, Joseph G., Jr., Mfr. and Miner.....Youngstown, Ohio. '05
*Butler, Mel C., Coal Mine Supt., Tacoma Smelting Co....Fairfax, Wash. '10
*Butler, Reginald H. B., Min. Engr., Mgr., U. S. Foil Co., 60 Fernbrook St., Yonkers, N. Y. '10
*Butler, William Curtis.....Prest., First National Bank, Everett, Wash. '96
*Butters, Charles, Min. Engr., Met.....121 59th St., Oakland, Cal. '83
*Byler, Emmett A., Min. Engr.....P. O. Box 192, Goldfield, Nev. '06
*Byrnes, Owen.....Gould, Lewis & Clark Co., Mont. '95

**Cabot, John, Jr., Care A. M. Hoyt & Co., 1 Broadway, New York, N. Y. '99
*Cadman, John..... ..The University, Edgbaston, Birmingham, England. '06
*Caetani, Gelasio, Civ., Min. Engr., Burch, Caetani & Hershey, Crocker Bldg., San Francisco, Cal. '04
*Cahoone, William M., Min. Engr.....Benton, Cal. '11
*Caine, Milton A., Min. Engr., Supt. of Mines, Tennessee Copper Co., Copperhill, Tenn. '06
*Cairns, Frederick I.....Houghton, Mich. '97
*Cairns, John M., Mgr. Bamankua Manganese Co., Shirajpur P. O., via Baroda Ry. Sta., India. '09
*Caldecott, William A., Cons. Met., Consolidated Gold Fields of South Africa, P. O. Box 1167, Johannesburg, Transvaal, So. Africa, '02
*Calderwood, James M., Cons. Engr., P. O. Box 2295, Johannesburg, Transvaal, So. Africa. '96
*Caldwell, Forest B., Min. Engr., Candelaria Cons. Mex. Mining Co., San Dimas, Dur., Mexico. '07
*Caldwell, Halsted W., Min. Engr.....Oxford, N. C. '10
*Caldwell, William A., Met. Chem., New Ravenswood Mining Co., Ltd., Ravenswood, Queensland, Australia. '05
**Callaghan, John T., Jr., Min. Engr, Met., 612 W. 7th St., Chester, Pa. '96
*Calland, Dean S., Asst. to Director, Cia. de Real del Monte y Pachuca, Pachuca, Hid., Mexico. '10
*Callaway, Fred W., Min. Engr., Bunker Hill & Sullivan M. & C. Co., Kellogg, Idaho. '12
†Callbreath, James F., Jr., Secty., Am. Mining Congress, 725 Majestic Bldg., Denver, Colo. '09
**Callow, John M., Cons. Engr.....159 Pierpont St., Salt Lake City, Utah. '06
*Cameron, William McC., Cons. Engr. to A. Goerz & Co., Box 1156, Johannesburg, Transvaal, S. A. '97
*Campbell, E. D.....1555 Washtenaw Ave., Ann Arbor, Mich. '93
*Campbell, Marius R., Geol....U. S. Geological Survey, Washington, D. C. '92
**Campbell, William, Met.....Columbia University, New York, N. Y. '03
*Camphuis, George A., Min. Engr.....Apartado 332, Chihuahua, Mexico. '01
*Canby, Robert C., Cons. Met.....334 So. Main St., Wallingford, Conn. '82
*Canfield, Frederick A., Min. Engr.....Dover, N. J. '74
*Cantley, Charles L., Asst. to Genl. Mgr., Nova Scotia Steel & Coal Co., Ltd., New Glasgow, Nova Scotia, Canada. '12
*Cantley, Thomas, Genl. Mgr., Nova Scotia Steel & Coal Co., Ltd., New Glasgow, Nova Scotia, Canada. '07
*Capdeville, J. Edouard, Min. Expert...80 Rue Taitbout, Paris, France. '06
*Caperton, W. Gaston.....Slab Fork, W. Va. '94
*Capp, John A., Chief of Testing Laboratory, General Electric Co., Schenectady, N. Y. '96
*Cardenas, Adolfo, Mine Supt., Purdy Engrg. Co., Apartado 750, San José, Costa Rica, C. A. '06
*Cardozo, Henri A., Chief Engr., Société d'Electrométallurgie de Dives, 54 Rue de Prony, Paris, France. '98
*Careaga, Cipriano R., Genl. Mgr., Sociedad Española Minas del Castillo de las Guardas, Bilbao, Spain. '09
*Carleton, James G., Min. Engr.....4 Gregory St., Marblehead, Mass. '92
*Carlton, Albert E., Mining and Banker.....Cripple Creek, Colo. '06
*Carlyle, Ernest J., Met., Famitima Co., Chelecito, Prov. La Riojo, Argentine Republic, S. A. '11

*Carlyle, William A., Min. Engr., Prof. of Met., Imperial College of Science and Technology, So. Kensington, London, Eng. '96
*Carmichael, Norman, Asst. Genl. Mgr., Arizona Copper Co., Clifton, Ariz, '99
*Carnahan, Charles T., C. T. Carnahan Mfg. Co., 36th and Wazee Sts., Denver, Colo. '89
*Carnahan, John S., Mine Supt., Mexican Lead Co., Monterey, N. L., Mexico. '97
*Carnahan, Robert B., Jr., Met., Genl. Supt., American Rolling Mill Co., Middletown, Ohio. '10
Carnegie, Andrew.....2 E. 91st St., New York, N. Y.
*Carney, Frank D., Genl. Supt., Penna. Steel Co..... .....Steelton, Pa. '12
*Carney, Hugh J., Min. Engr.....Ouray, Colo. '04
*Carpenter, Alvin B., Min. Engr., 1015 California Bldg., Los Angeles, Cal. '97
*Carpenter, Arthur Howe, Research Met., American Vanadium Co., Carnegie, Pa. '05
*Carpenter, Edwin E., Min. Engr.....Tonopah, Nev. '10
*Carpenter, Rolla C., Prof., Experimental Engineering, Cornell University, Ithaca, N. Y. '00
*Carr, Henry C., Min. Engr., Apt. 701, The Woodward, Washington, D. C. '05
*Carr, Percy E. O., Genl. Mgr., Mazapil Copper Co., Apartado 64, Saltillo, Mexico. '92
*Carrigan, Andrew, Merchant.....P. O. Box 449, San Francisco, Cal. '99
*Carroll, Lafayette D., Gas Engr., Care Humphreys & Glasgow, 38 Victoria St., London, S. W., England. '88
*Carry, Henry E. C., Civ. and Min. Engr., 1306 Cardero St., Vancouver, B. C., Canada. '97
*Carson, Arthur C., Min. Supt., Rm. 2027, 42 Broadway, New York, N. Y. '84
*Carson, Ellard W.....2142 Thompson St., Los Angeles, Cal. '06
*Carter, Henry M., Met., Care Handy & Harman, 202 John St., Bridgeport, Conn. '02
*Carter, Palmer, Genl. Mgr., Robinson G. M. Co., P. O. Box 1024, Johannesburg, Transvaal, So. Africa. '95
*Carter, Thomas E., Min. Engr.....321 James Bldg., Chattanooga, Tenn. '13
*Case, Albert H., Min. Engr., Mgr., Tennessee Copper Co., Copperhill, Tenn. '06
*Case, Benjamin H., Min. Engr.....5 Edgehill Ave., Asheville, N. C. '03
*Casey, John P., Min. Engr.....1509 Montana St., El Paso, Texas. '03
*Cates, Louis S., Mgr., Ray Cons. Copper Co.....Ray, Ariz. '04
*Catlett, Charles, Chem., Geol. and Min. Expert.....Staunton, Va. '95
**Catlin, Robert M., Min. Engr., N. J. Zinc Co., Franklin Furnace, N. J. '00
*Cautley, Arthur O., Min. Engr., Care H. Milner Willis, 24 Walbrook, London, E. C., England. '03
*Cavazos, Enrique, Min. Engr., 2a de Allende 20½, Saltillo, Coah., Mexico. '11
*Caypless, Willis S., Min. Engr.....Am. Smelting & Refining Co., Matehuala, S. L. P., Mexico. '08
*Cazin, Franz, Mech. Engr.....McPhee Bldg., Denver, Colo. '89
*Cerrina-Feroni, Paolo, Mine Mgr.,.....Firenze, via Serragli, 6, Italy. '04
*Chadbourne, Humphrey W., Min. Engr., 14 Wall St., New York, N. Y. '11
*Chalmers, George, Min. Engr., Supt., St. John del Rey Mining Co., Ltd., Morro Velho, Villa Nova de Lima, Minas Geraes, Brazil, So. America. '92
*Chalmers, Thomas S., Mfr., Chalmers & Williams, Commercial National Bank Bldg., Chicago, Ill. '06
*Chalmers, William J., 1733 Commercial Nat. Bank Bldg., Chicago, Ill. '94

*CHAMBERLAIN, H. S., Mfr., Min., Prest., Roane Iron Co., Chattanooga, Tenn. '75
*CHAMBERLIN, JOHN R., Draftsman,
4a Tobasco No. 122, Mexico City, Mexico. '07
*CHAMBERLAIN, MORROW, Secy. and Treas., Roane Iron Co.,
Chattanooga, Tenn. '12
*CHAMBERS, FRANK M., International Smelting & Refg. Co., Goldfield, Nev. '07
*CHAMBERS, ROBERT E., Mgr., Ore Mines and Quarries, The Nova Scotia
Steel and Coal Co., Ltd., New Glasgow, N. S., Canada. '91
*CHAMBOST, PIERRE J. E. E., Engr. of Mines, Messrs. Sautter Harle & Cie.,
28 Ave. de Suffren, Paris, France. '03
*CHANCE, EDWIN M., Chem.....Pottsville, Pa. '11
*CHANCE, DR. H. MARTYN, Min. Engr., 839 Drexel Bldg., Philadelphia, Pa. '74
*CHANDLER, CHARLES F., Prof. of Chem., Columbia Univ., New York, N. Y. '90
*CHANEY, R. GORDON, JR., Engr., Independent Coal & Coke Co.,
Kenilworth, Utah. '08
*CHANNING, J. PARKE, Cons. Min. Engr.....42 Broadway, New York, N. Y. '84
*CHANNING, ROSCOE H., JR.....42 Broadway, New York, N. Y. '04
*CHAPLIN, GEORGE P., Min. Engr.,
63 Holland Park Ave., London, W., England. '97
*CHAPMAN, JAMES E., Min. Engr., Asst. Supt., Mammoth Mine,
Mammoth, Shasta Co., Cal. '04
*CHAPMAN, ROBERT H., Topographer, U. S. Geol. Survey, Washington, D. C. '97
*CHAPPELL, HOWARD F.....55 Wall St., New York, N. Y. '94
*CHARLES, WILLIAM W., Comptroller, Tonopah Mining Co. of Nev.,
Tonopah, Nev. '10
*CHARLETON, A. G., Cons. Min. Engr., Mansion House Chambers,
11 Queen Victoria St., London, E. C., England. '81
*CHARTIER, GEORGE M., Min. and Cons. Engr.,
1144 Title Insurance Bldg., Los Angeles, Cal. '11
*CHASE, CHARLES A., Min. Engr.,
733 1st National Bank Bldg., Denver, Colo. '00
*CHASE, CLARENCE C.....Apartado 12, Cananea, Son., Mexico. '05
**CHASE, EDWIN E., Min. Engr.....1450 William St., Denver, Colo. '03
*CHASE, FRANK D., Compania Minera Fundidora y Afinadora "Monterey,"
Apartado 27, Monterey, Mexico. '84
*CHASE, FRED M., Asst. Genl. Mgr., Lehigh Valley Coal Co.,
Wilkes-Barre, Pa. '11
*CHATARD, THOMAS M., Chem., 1716 Rhode Island Ave., Washington, D. C. '88
*CHAUVENET, REGIS, Min. Engr.....937 Equitable Bldg., Denver, Colo. '03
*CHAUVENET, S. H., Mgr., Berkshire Iron Works, Sheridan, Lebanon Co., Pa. '81
*CHEDSEY, WILLIAM R., Min. & Met. Engr., 1414 Gaylord St., Denver, Colo. '10
*CHENHALL, J. WARNE, Min., Met. Engr., Illogan Redruth, Cornwall,
England. '05
*CHENNELLS, J. ARNOTT, Min. Engr., Elisabethville, Congo Belge, So. Africa. '02
*CHEVRILLON, LOUIS, Min. Engr....Apartado 18, Bis, Mexico City, Mexico. '02
*CHEYNEY, JESSE S., Vice-Prest., and Genl. Supt.,
Stonegap Colliery Co., Glamorgan, Va. '13.
*CHEYNEY, SAMUEL W., Min. Engr.....237 First St., San Francisco, Cal. '87
*CHIAPPONI, MARCO, Min. Engr.....49 Rue de Courcelles, Paris, France. '10
*CHIBAS, EDUARDO J., Civ., Min. Engr. and Contractor,
Calvario baja 14, Santiago de Cuba, Cuba. '96
*CHIBAS, LUIS F., Engr. Cont., Jefatura de Minas, Santiago de Cuba, Cuba. '01

**CHIPPENDALE, ARTHUR, Chem., American Club, Mexico City, Mexico. '99
**CHOATE, WAYNE, Min. Engr.....827 Central Bldg., Los Angeles, Cal. '02
*CHRISTENSEN, ARTHUR O., Min. Supt..... Groton, Mass. '10
**CHRISTIAN, AUGUST, Chief Engr., Min. Dept.,
Anaconda Copper Mining Co., Butte, Mont. '99
*CHRISTIANSON, PETER, Instructor of Met., Minnesota School
of Mines, State University, Minneapolis, Minn. '01
*CHRISTY, SAMUEL B., Prof. Min., Met., Univ. of California, Berkeley, Cal. '83
*CHURCH, PROF. JOHN A., Min. Engr.....15 William St., New York, N. Y. '72
*CHURCH, JOHN A., JR., Min. Engr., B. & M. Smelter, Great Falls, Mont. '07
*CHURCH, JOHN L., Min. Engr.....White Sulphur Springs, Mont. '07
†CHYNOWETH, B. F.....Houghton, Mich. '76
*CIRKEL, FRITZ, Cons. Min. Engr.....8 Stanley St., Montreal, Canada. '10
*CIVRETTO, HYACHINTHUS P., Mine Supt.....Instructed to hold all mail. '08
*CLAGETT, THOMAS H., Chief Engr., Pocahontas Coal & Coke Co.,
Bluefield, W. Va. '12
*CLAGHORN, CLARENCE R., Northwestern Improvement Co.,
Headquarters Bldg., Tacoma, Wash. '84
*CLAPP, FREDERICK G., Cons. Geol. Engr.....331 4th Ave., Pittsburg, Pa. '10
*CLAPP, GEORGE H., Chairman, Pittsburg Testing Laboratory, Ltd.,
7th and Bedford Aves., Pittsburg, Pa. '83
*CLAPP, LAURENCE R., Min. Engr, Silver Lake Mines.....Silverton, Colo. '12
*CLARK, ALLAN J., Met.....Homestake Mining Co., Lead, S. D. '97
*CLARK, C. DAWES.....Care W. R. Cox, 165 Broadway, New York, N. Y. '03
*CLARK, CLARENCE M., Banker, E. W. Clark & Co.,
321 Chestnut St., Philadelphia, Pa. '88
*CLARK, EDWARD W., Supt., Ophir Hill Cons. Mining Co.....Ophir, Utah. '04
†CLARK, FREDERICK.....410 Hearst Bldg., San Francisco, Cal. '98
*CLARK, FREDERICK H., Min. Engr.....30 Broad St., New York, N. Y. '07
*CLARK, GEORGE M., Mgr., Sherman Mining &Milling Co., Placerville, Cal. '99
*CLARK, HORACE H., Chem..... 208 So. 43d Ave., Chicago, Ill. '08
*CLARK, JAMES M., Civ. and Min. Engr., Care Clark & Krebs,
813 Kanawha St., Charleston, W. Va. '02
*CLARK, JOHN E., Min. Engr.....2193 Victoria Ave., Riverside, Cal. '11
†CLARK, JOHN M., Barrister.....156 Yonge St., Toronto, Ont., Can. '08
*CLARK, JOSIAH H., Min. Engr.....80 Broadway, New York, N. Y. '98
*CLARK, LINDESAY C., Min. Engr., Genl. Mgr., The Briseis Mines, Ltd.,
Derby, Tasmania. '99
**CLARK, MAURICE, Min. Engr.....Apartado 105, Oaxaca, Mexico. '86
*CLARK, V. V., Min. Engr.....444 Henry Bldg., Seattle, Wash. '99
*CLARK, WALTON, Gas Engr., Gen. Supt., The United Gas Imp. Co.,
Broad and Arch Sts., Philadelphia, Pa. '96
*CLARK, WILLIAM A., Banker, Mining, 20 Exchange Pl., New York, N. Y. '82
*CLARK, WILLIAM B., Geol., Johns Hopkins University....Baltimore, Md. '08
*CLARK, WILL L., Asst. Genl. Mgr., United Verde Copper Co..Jerome, Ariz. '03
*CLARKE, ALEXANDER C., Min. Engr., Midgham House, near Reading,
England. '11
*CLARKE, E. A. S., Prest., Lackawanna Steel Co.,
2 Rector St., New York, N. Y. '85
**CLARKE, HOPEWELL.....775 Portland Ave., St. Paul, Minn. '96
*CLARKE, ROY H., Min. Engr., 632 Old National Bank Bldg.,
Spokane, Wash. '01

*Claudet, H. Hayman, Met. Engr.....Rossland, B. C., Canada. '03
*Claypool, W. M., Min. Engr..... .....Needles, Cal. '84
*Cleaveland, Newton, Genl. Mgr., Natomas Cons. of Calif.,
Alaska Commercial Bldg., San Francisco, Cal. '01
*Cleland, E. Davenport, Supt., Gt. B. Perseverance Gold Mine,
Fimiston, Western Australia. '90
**Cleland, George A., Min. Engr..... 240 Wabash Ave., Chicago, Ill. '06
*Clement, F. H., Civ. Engr.....124 West 48th St., New York, N. Y. '92
*Clement, Harrison Edward, Engr. and Contractor,
University Club, Salt Lake City, Utah. '02
*Clements, Frank O., Chem., National Cash Register Co.,
8 Yale Ave., Dayton, Ohio. '06
*Clements, J. Morgan, Cons. Min. Geol. and Engr.,
20 Broad St., New York, N. Y. '01
**Clemes, John H., Min. Engr., "Cheriton," Mount Wise,
Newquay, Cornwall, England. '81
*Clerc, Camille, Min. Engr.....92 Rue Jouffrey, Paris, France. '10
*Clerc, F. L.....Boulder, Colo. '87
*Cleveland, Ernest A.....Rogers Bldg., Vancouver, B. C., Canada. '03
*Clevenger, Galen H., Met.....381 Hawthorne Ave., Palo Alto, Cal. '03
*Clymer, Edward T.....806 North 63d St., Philadelphia, Pa. '82
*Clymer, Frederick H., Min. Engr.....Roane Iron Co., Rockwood, Tenn. '97
*Cobb, Harold McL., Min. Engr.....Guanacevi, Durango, Mexico. '04
*Cobb, William L., Min. Engr.....Sausalito, Cal. '03
*Cobbe, Hervic N. G., Min. Engr., 86 York St., Westminster,
London, S. W., England. '01
*Cockerell, Leslie M.....Apartado 143, Chihuahua, Mexico. '00
*Coe, Ira J., Cement and Min. Engr.....541 28th St., Oakland, Cal. '03
*Coe, William W., Genl. Mgr., Pocahontas Coal & Coke Co., Roanoke, Va. '83
*Coffin, William C., Structural Engr., Jones & Laughlin Steel Co.,
Pittsburg, Pa. '92
**Cogswell, William B., Vice-Prest. and Managing Director,
Solvay Process Co., Syracuse, N. Y. '72
**Cohen, E. H. A., Cons. Min. Engr. and Mgr., Rand Club,
Johannesburg, Transvaal, So. Africa. '94
*Cohen, H. A., Min. Engr.....2218 Clay St., San Francisco, Cal. '89
*Cohen, Louis, Min. Engr...230 First National Bank Bldg., Denver, Colo. '01
*Cohen, Samuel W., Genl. Mgr., Crown Reserve Mining Co.,
Cobalt, Ont., Can. '09
*Colbath, Harry, Mill Supt., Care J. W. McKim, Dooly Block,
Salt Lake City, Utah. '00
*Colburn, C. Lorimer, Min. Engr.....614 Ideal Bldg., Denver, Colo. '08
*Colby, Albert Ladd, Cons. and Inspecting Engr.,
and Iron and Steel Met., 447 Lehigh St., So. Bethlehem, Pa. '83
*Colcord, Frank F., Chem., U. S. Metals Refining Co., 42 Broadway,
New York, N. Y. '05
*Cole, Arthur A., Min. Engr., Temiskaming & Northern Ontario
Railway Commission, Cobalt, Ont., Canada. '02
*Cole, David, Min. Engr.....35 E. University Ave., Tucson, Ariz. '05
*Cole, Frank L., Min. Engr..... .....Shanghai, China. '04
*Cole, Lionel H., Min. Engr., Mines Branch, Dept. of Mines,
Ottawa, Ont., Canada. '07

*Cole, T. F.....1400 Alworth Bldg., Duluth, Minn. '90
*Cole, Walter B., Min. Engr., Ohio Copper Co.....Lark, Utah. '08
*Coleman, Bertrand Dawson.....Lebanon, Pa. '95
**Collbran, Arthur H., Min. Engr., Genl. Mgr., Seoul Mining Co., Care Suan Mine, Pyeng Yang, Korea. '05
*Colley, Bernard T., Supt., Braden Copper Co., Rancagua, Chile, So. Am. '88
*Collier, John H., Min. Engr.....3014 Nicol Ave., Oakland, Cal. '00
**Collin, Emile C., Mgr., Cie. des Mines et Usines d'Escombrera, Bleyberg (Spain and Belgium), 49 Rue de Miromesnil, Paris, France. '86
*Collings, Burton I.....P. O. Box 270, Salisbury, Rhodesia, So. Africa. '02
*Collins, Edgar A., Min. Engr., Supt., Commonwealth Mine, Pearce, Ariz. '04
*Collins, Edwin J., Cons. Min. Engr....1008 Torrey Bldg., Duluth, Minn. '09
*Collins, Francis W., Civ., Min. Engr....50 Church St., New York, N. Y. '03
**Collins, George E., Min. Engr.....420 Boston Bldg., Denver, Colo. '00
*Collins, Glenville A., Cons. Engr., Prest., Idora Hill Mining Co., Wallace, Idaho. '07
**Collins, Henry F., Min., Met. Engr., Huelva Copper & Sulphur Mines, Ltd., Valdelamusa, Prov. de Huelva, Spain. '96
*Collins, John P., Blast Furnace Supt.....222 Mathilda St., Pittsburg, Pa. '05
*Collins, W. J.....Instructed to hold all mail. '93
*Collord, George L., Genl. Furnace Mgr., Shenango Furnace Co., Sharpsville, Pa. '01
**Colquhoun, James.....31 Ferndale, Tunbridge Wells, England. '98
*Colton, Charles A., Director, Newark Technical School, 367 High Street, Newark, N. J. '74
**Colvin, Verplanck, Box No. 1, The Capitol.....Albany, N. Y. '81
*Colvocoresses, George M., Min. Engr., Room 1407, 43 Exchange Pl., New York, N. Y. '07
*Colwell, Alfred B., Min. Engr.....P. O. Box 135, Ely, Nev. '03
*Colyar, Louis S., Prest., Eagle Iron Co.....Chattanooga, Tenn. '85
*Comings, George R., Min. Engr.....Apartado 126, Oaxaca, Oax., Mexico. '05
*Comstock, Charles W., Civ., Min. Engr., 213 Boston Bldg., Denver, Colo. '00
*Comstock, Theodore B., Prest., *California Farm and Home Builder*, 909 Van Nuys Bldg., Los Angeles, Cal. '80
*Conant, H. D., Supt., Lake Superior Smelting Co.....Dollar Bay, Mich. '88
*Conley, Owen J., Min. Engr.....52 Broadway, New York, N. Y. '02
*Conner, Eli T., Min. Engr., 1126 Real Estate Trust Bldg., Philadelphia, Pa. '92
*Conner, H. McKean, Min. Engr., Genl. Supt., Continental Coal Corpn., Inc., Pineville, Ky. '08
**Connor, S. B., Gold Dredging and Mining, Mills Bldg., San Francisco, Cal. '88
*Conradson, Pontus H., Chief Chem., Galena Signal Oil Wks., Franklin, Pa. '92
*Cook, Edgar S.....Prest., Warwick Iron and Steel Co., Pottstown, Pa. '77
*Cook, Edward B., Furnace Mgr.....743 King St., Pottstown, Pa. '06
*Cook, Edward H., Min. Engr., Mgr. & Owner, Minas de Birimoa, Birimoa, via Canelas, Dur., Mexico. '96
*Cook, Frederick S., Cons. Min. Engr.....Joplin, Mo. '07
*Cook, James B., Supt., Berwind-White Coal Mining Co., Spirit Bldg., Punxsutawney, Pa. '10
*Cook, Robert A., Portland Cement.....229 Broadway, New York, N. Y. '83
*Cooke, Fredrick W., Secy. & Treas., Hardinge Conical Mill Co., 50 Church St., New York, N. Y. '12

*Cooke, Henry M. A., Min. Engr., Supt., Balaghat Gold Mining Co., Ltd, Coromandel P. O., Kolar Gold Field, South India. '01
**Cooke, Lewis H.....Royal School of Mines, London, S. W., England. '01
*Coolidge, Walter G., Copper Ref., Chicago Copper Refining Co., 310 Western Union Bldg., Chicago, Ill. '82
**Cooper, Hugh L., Cons. Engr.....Rand Bldg., Keokuk, Iowa. '06
††Cooper, James B., Supt., Calumet and Hecla Smelter.....Hubbell, Mich. '99
**Cooper, John.....52 Pinhoe Rd., Exeter, Devonshire, England. '03
*Cooper, Maurice D., Min. Engr, Care Ellsworth Collieries Co., Ellsworth, Pa. '10
*Coote, Charles E., Min. Engr., Mt. Lyell Comstock Copper Co., North Lyell, Tasmania. '06
*Copeland, F. K., Prest., Sullivan Machy. Co., 413 Peoples Gas Bldg., Chicago, Ill. '87
*Corbin, J. Ross, Cons. Engr.....1729 Master St., Philadelphia, Pa. '11
**Corbould, William Henry, Genl. Mgr., Mount Elliott Mine, Cloncurry, Queensland, Australia. '92
*Corbus, A. W.....1512 La Lama Ave., Berkeley, Cal. '00
**Corbus, J. Parker.....P. O. Box 123, Los Gatos, Cal. '96
*Corey, W. E.....14 Wall St., New York, N. Y. '94
*Corfield, Reginald W. G., Met., 5 Richmond Villas, Swansea, England. '06
*Corkill, Edward T., Inspector of Mines, Bureau of Mines, Toronto, Ontario, Canada. '07
*Corkill, Frederick, Min. Engr.....2611 Ashby Ave., Berkeley, Cal. '07
*Corless, C. V., Min. Engr., Mgr. of the Mond Nickel Co., Ltd., Victoria Mines, Ont., Canada. '08
*Cormack, Robert R.....Instructed to hold all mail. '06
*Cornelius, William A., Mgr., Natl. Dept., National Tube Co., McKeesport, Pa. '01
*Cornell, Roy L. G., Chef de Mission, Société internationale Forestière et Minière du Congo, Kanwa, via Banalia, Congo Belge, W. Africa, '12
**Cornell, Russell T., Min. Engr..... 45 Cedar St., New York, N. Y. '02
*Corning, C. R., Min. and Cons. Engr., Olcott & Corning, 36 Wall St., New York, N. Y. '86
*Corning, Frederick G., Min. Engr.....35 Wall St., New York, N. Y. '77
*Cornish, Harry L., Min. Engr.....54 Natoma St., San Francisco, Cal. '03
†Corry, Arthur V., Min. Engr.....203 Lewishon Bldg., Butte, Mont. '97
*Cosby, Frederick N., Min. Engr.....Pioche, Nev. '03
*Cosgro, John P.....Apartado Postal 447, Mexico City, Mexico. '01
*Coste, Eugène, Min. Engr. and Geol., Prest., Canadian Mining Institute, Canada Permanent Bldg., 18 Toronto St., Toronto, Ontario, Canada. '87
*Cottrell, Frederick G., Chief Physical Chem., U. S. Bureau of Mines, 506 U. S. Custom House, San Francisco, Cal. '12
*Couldrey, Paul S., Min. Engr., Genl. Supt., Cerro de Pasco Min. Co., Cerro de Pasco, Peru, So. Am. '06
**Coumerilh, William, Mine Operator.....Mullan, Idaho. '95
*Courtis, William M., Min. Engr. and Met., 338 Merrick Ave., Detroit, Mich. '71
**Courtney, Charles F., Civ. and Min. Engr., Sulphide Corporation, Ltd., 34 Queen St., Melbourne, Victoria, Australia. '97
*Cousin, Robert, Min. Engr., Gurum River (Nigeria) Tin Mines, Ltd., Naragata, No. Nigeria, W. Africa. '12

*Cowans, Frederick, Min. Engr., Utah Consolidated Mining Co., Salt Lake City, Utah. '05
**Cowles, Alfred H.....Sewaren, N. J. '86
*Cox, Guy H., Teaching and Mining.....Rolla, Mo. '12
*Cox, Herbert B.....Calais, Me. '04
*Cox, Jennings S., Jr., Genl. Mgr., Spanish-American Iron Co., Santiago de Cuba, Cuba. '99
*Cox, Thomas, Cons. Engr.....463 Ellita Ave., Oakland, Cal. '01
*Cox, William J.....304 Boston Bldg., Denver, Colo. '93
*Cox, W. Ray, Min. Engr., Assayer, Chem., Field Div., General Land Office, U. S. Custom House, Portland, Ore. '03
*Cox, W. Rowland, Mine Mgr.....165 Broadway, New York, N. Y. '03
*Coxe, Charles E., Ore Buyer, Apartado 21, Sombrerete, Zacatecas, Mexico. '00
**Coxe, Eckley B., Jr., Anthracite Coal Operator.....Drifton, Pa. '93
*Coxe, Edmond J. D., Min. Engr.....308 S. 24th St., Philadelphia, Pa. '08
*Coxe, Edward H., Genl. Supt. of Coal Mines, Tennessee Coal, Iron & R. R. Co., Birmingham, Ala. '10
*Coyle, John A., Supt., Hess Steel Castings Co., P. O. Box 476, Bridgeton, N. J. '12
*Crabtree, Fred., Prof. Min. and Met., Carnegie Technical Schools, Pittsburg, Pa. '11
*Crafts, Walter N., Mfr. of Mach., 56 East Prospect St., Cleveland, Ohio. '95
*Crandall, Roderic, Geol., Fazendas Nacionaes do Rio Branco, Amazonas, Brazil, So. America. '12
*Crane, Gerard A., Min. Engr...6 Gt. Winchester St., London, England. '04
†Crane, Theron I., Pilling & Crane, Real Estate Trust Bldg., Philadelphia, Pa. '92
*Crane, Walter R., Prof. Mining, Pa. State College, State College, Pa. '00
*Crankshaw, Hugh M., Min. Engr., Lehigh Coal & Navigation Co., Lansford, Pa. '12
*Cranston, Robert E., Mine Mgr.,.....819 Mills Bldg., San Francisco, Cal. '99
*Crary, Charles N., Mining.....Valdez, Alaska. '08
*Crawford, George G., Prest., Tennessee Coal, Iron & R. R. Co., Birmingham, Ala. '00
*Crawford, Henry E., Min. Engr., Care J. G. Crawford, 450 81st St., Brooklyn, N. Y. '02
*Crawford, John J.,.....Bohemia Club, San Francisco, Cal. '73
*Crawford, Rufus C., Coal Operator.....McKeesport, Pa. '10
**Crawford, Walter H., Cons. Min. Engr.....52 Astor St., Boston, Mass. '05
*Crease, Herbert H., Min. Engr., Santana, near Honda, Colombia, So. Am. '10
*Cremer, Felix.....Apartado 1939, Mexico City, Mexico '00
*Cremer, Dr. Fritz, Met. Engr., Marshall-Wells Hdw. Co., Duluth, Minn. '07
*Cremer, J. H.....24 Superior St., Cleveland, Ohio. '75
**Crespi, R. A., Mining, Care John M. Keith, San José, Costa Rica, C. A. '05
*Crewe, Leonard C., Genl. Mgr.....LaFollette Iron Co., La Follette, Tenn. '03
*Crichton, Andrew B., Min. Engr..... .....Johnstown, Pa. '10
*Crockard, Frank H., Vice-Prest., Tennessee Coal, Iron & R. R. Co., 1524 Brown-Marx Bldg., Birmingham, Ala. '95
**Crocker, A. L., Mech. Engr., 314 National Bank of Commerce Bldg., Minneapolis, Minn. '80
*Cromwell, Robert H., Min. Engr., Asst. Supt. Teziutlan Copper Co., Aire Libre, Pue., Mexico. '03

*Cronin, Paul B., Met. Engr.....721 S. Hope St., Los Angeles, Cal. '07
*Crook, Welton J., Steel Wks. Chem., P. O. Box 985,
Stanford University, Cal. '12
*Crooke, Robert L.....101 Beekman St., New York, N. Y. '89
*Crooker, Ralph, Cons. Engr.....Acton, Mass. '81
*Crookston, A. W., Min. Engr....188 St. Vincent Street, Glasgow, Scotland. '80
*Crosby, William O., Prof. Geol., Mass. Inst. Technology, Boston, Mass. '03
*Cross, Edward O.....77 Stanwood Rd., East Cleveland, Ohio. '06
*Crossette, Murray F., Min. Engr., Estacion San Antonio, Chih., Mexico. '08
*Crowell, Benedict, Min. Engr., Crowell & Murray,
407 Perry-Payne Bldg., Cleveland, Ohio. '93
*Crowley, T. Irwin,.....Dome Mine, So. Porcupine, Ont., Canada. '07
†Crowther, John S., Jr., Asst. Supt., Toledo Furnace Co., Toledo, Ohio. '12
*Croxton, David T., Min. Engr., Genl. Mgr., Cleveland Furnace Co.,
1314 Rockefeller Bldg , Cleveland, Ohio. '93
*Croxton, Samuel W., Iron Mfr., Prest. and Genl. Mgr., The Pennsylvania
Iron & Coal Co., 1314 Rockefeller Bldg., Cleveland, Ohio. '75
*Crum, J. Richmond, Min. Engr.....Trentham, Stoke-on-Trent, England. '07
*Cuellar, Salvador, Min. Engr., 403 Calle Ojenaga, Chihuahua, Mexico. '11
**Cuevas, Luis G., Assayer.....Apartado 148, San Luis Potosi, Mexico. '97
*Cullum, J. Barlow.....Pottsville, Pa. '91
*Cumings, W. L., Geol. and Min. Engr...409 E. Broad St., Bethlehem, Pa. '06
*Cummings, George P., Civ. and Min. Engr.....Marquette, Mich. '81
*Cummings, William N., Min. Engr.....1st and Cedar Sts., Glendale, Cal. '93
*Cummins, Harle O., Mgr., Gold Leaf Mine.....Shasta, Cal. '07
*Cummins, William N., Min. Engr., Genl. Supt., Red Jacket Cons.
Coal & Coke Co., Red Jacket, W. Va. '10
*Cunniff, Bernard, Min. Engr.....1121 Munroe Bldg., Chicago, Ill. '12
*Cunningham, Eckley S., Mgr., Mines, Water Co. ; Engr.,
Oil & Navigation Cos., Wonder, Nev. '99
*Cunningham, James S.....National City Bank Bldg., Charleston, W. Va. '83
*Cunningham, John C., Engr., Care Broken Hill South Silver Mining Co.,
Broken Hill, New South Wales, Australia. '04
*Cunningham, Parker H., Min. Engr., 306 N. Jefferson St.,
New Castle, Pa. '05
*Cunnyngham, Floyd E., Min. Engr., Mgr., Pulaski Iron Co.,
Eckman, W. Va. '07
*Currie, David, Min. and Met. Engr., Lake & Currie, Norfolk House,
7 Laurence Pountney Hill, London, E. C., England. '00
*Currie, John M., Min. Engr., Lake & Currie, Norfolk House,
Laurence Pountney Hill, London, E. C., England. '05
**Currie, Walter, Cons. Min. Engr., Willoughby's Consolidated Co., Ltd.,
Bulawayo, Rhodesia, So. Africa. '96
*Curtis, Bracey, Banker.....Nogales, Ariz. '07
*Cutting, Charles H.....329 High St., Newburyport, Mass. '01

*Daggett, Ellsworth, Min. Engr. Cumings Apartments,
Salt Lake City, Utah. '73.
*Dahl, O. Robert, Mine Operator.....528 New York Block, Seattle, Wash. '06
*Dake, Walter M., Jr.....Rainbow Mill, Rye Valley, Baker Co., Ore. '12
*Dakin, Frederick H., Jr., Min. Engr., 110 Sutter St.,
San Francisco, Cal. '04

*Dalburg, Frank A., Division of Mines, Bureau of Science, Manila, P. I. '04
*Dale, William C., Min. Engr., Casilla 230, Copiapo, Chile, So. America. '12
*Dalton, Henry G., Prest., Toledo Furnace Co.,
Western Reserve Bldg., Cleveland, Ohio. '06
*Dalton, Melvin P., Mining.....Poza, Son., Mexico. '10
*Dalton, Michael P., Mill Supt.....Mullan, Idaho. '12
*Damon, George G., Chem..... .....5748 Kimbark Ave., Chicago, Ill. '06
*Dan, Takuma, Managing Director, Mitsui Mining Co.,
No. 1, Suruga-Cho Nihombashi-Ku, Tokyo, Japan. '88
*Dana, Richard T., Cons. Engr.....15 William St., New York, N. Y. '04
*Daniel, James M., Jr.....459 Washington Ave., Brooklyn, N. Y. '04
*Daniel, William B., Min. Engr.....2443 Woolsey St., Berkeley, Cal. '00
*Daniell, John.....Orijarvi, Kisko, Finland. '10
*Daniels, Frederick H., Chief Engr., Am. Steel & Wire Co.,
214 Salisbury St., Worcester, Mass. '76
*Daniels, Joseph, Asst. Prof. Min. Engrg., College of Mines,
University of Washington, Seattle, Wash. '11
*Darby, Thomas L., Civ., Min. Engr., 211 Continental Bldg., Denver, Colo. '98
*Darlington, Wayne, Cons. Min. Engr. and Met.....Georgetown, S. C. '95
*Darsie, James, Vice-Prest. and Genl. Mgr., The Hecla Coke Co.,
401 Wood St., Pittsburg, Pa. '93
*Dart, Albert C., Cons. Min. Engr.....Rock Island, Ill. '02
*Darton, N. H., Geol.....U. S. Bureau of Mines, Washington, D. C. '94
*Daveler, Erle V., Asst. Supt. of Mill, Ray Cons. Copper Co.,
P. O. Box 257, Hayden, Ariz. '09
*David, W. M.....Address wanted. '88
*Davidson, George M., Chem. and Engr. of Tests,
Chicago & North Western Ry. Co., Chicago, Ill. '81
*Davidson, Otto C., Genl. Supt., Iron Mines, Oliver Iron Mining Co.,
Iron Mountain, Mich. '91
*Davies, William H., Div. Supt., Lehigh Valley Coal Co., Hazleton, Pa. '97
*Davis, Britton, Mine Mgr.,
Care A. G. Agnew, 22 William St., New York, N. Y. '90
*Davis, Carl R., Min. Engr., Genl. Mgr., Lancaster Gold Mining Co.,
Ltd., Krugersdorp, Transvaal, South Africa. '99
*Davis, Charles H., Cons. Engr.....18 Old Slip, New York, N. Y. '00
*Davis, Charles W.....407 Cedar Lane, Edgeworth, Pa. '02
*Davis, Floyd, Cons. Min. Engr. and Met., 5024 Page Ave., St. Louis, Mo. '83
*Davis, Frank S., Min. Engr.....Glenwood Springs, Colo. '01
*Davis, George C., Anal. and Cons. Chem.....39 S. 10th St., Philadelphia, Pa. '93
*Davis, Harold P., Mining.....25 Broad St., New York, N. Y. '10
*Davis, Henry G., Div. Supt. Mines, D. L. & W. R. R. Co.,
352 Rutter Ave., Kingston, Pa. '11
*Davis, Herman.....752 N. Center St., Reno, Nev. '01
*Davis, James C., Asst. 1st Vice-Prest., American Steel Foundries,
Commercial National Bank Bldg., Chicago, Ill. '98
*Davis, John A., Asst., U. S. Bureau of Mines.....Washington, D. C. '11
*Davis, Lewis K., Mech. Engr., N. Y. Holding & Construction Co.,
507 Fifth Ave., New York, N. Y. '93
*Davis, Morgan, Jr., Min. Engr....Room 42, Coal Exchange, Scranton, Pa. '93
*Davis, Stewart A., Asst. to 1st Vice-Prest.,
American Sheet Steel & Tin Plate Co., Pittsburg, Pa. '01

*Davis, Thomas B., Vice-Prest., Davis Coal & Coke Co., 1 Broadway, New York, N. Y. '06
*Davis, W. Walley, Supt. By-Product Coke Ovens, Semet-Solvay Co., Steelton, Pa. '12
*Davis, Walter W., Vice-Prest. & Genl. Mgr., Yak Min., Mill & Tunnel Co., Leadville, Colo. '12
*Davis, William J., Jr., Pacific Coast. Engr., General Electric Co., 720 Rialto Bldg., San Francisco, Cal. '10
*Davison, George L., Mining.....P. O. Box 256, Mt. Pleasant, Tenn. '97
*Daw, John W., Civ. and Min. Engr., Walreddon Manor, Tavistock, Devon., England. '93
*Dawbarn, Gilbert J., Min. Engr.....Wallaroo Mines, South Australia. '04
*Day, Arthur M., International S. & R. Co.....Tooele, Utah. '03
**Day, David T., Petroleum Expert, U. S. Geological Survey, Washington, D. C. '87
*Day, William H., Jr., Mfg. and Mining.....Dubuque, Iowa. '00
**Dean, A. L., Met., Mt. Lyell M. & Ry. Co., Ltd., Queenstown, Tasmania. '96
*Deardorff, Alpheus E., Mine Foreman, Care Oriental Cons. Mining Co., Unsan Mines, Korea. '10
*De Armond, Charles F., Min. Engr., 519 Metropolis Bank Bldg., San Francisco, Cal. '06
*De Deken, Albert, Met., Min. Engr. and Chem., 64 Station St., Louvain, Belgium. '84
*Deegen, John, Mine Engr.....Hemet, Cal. '09
*Defty, William E., Min. Engr.....Phoenix, Ariz. '02
*De Hora, Manuel H., Civ., Min. Engr., Care American Consul, Barranquilla, Colombia, So. America. '08
*Deidesheimer, Phillipp, Min. Engr., 2808 Clay St., San Francisco, Cal. '00
*Deike, George H.....Address wanted. '06
*DeKalb, Courtenay, Cons. Engr., Pacific Smelting & Mining Co., Tucson, Ariz. '92
**Delano, Frederic A., Pres., Wabash R. R. Co., 515 Western Union Bldg., Chicago, Ill. '86
**Delano, Warren, Coal Operator.....1 Broadway, New York, N. Y. '92
*De Lashmutt, Ivan, Min. Engr. Supt., Hobson Silver Lead Co., Ymir, B. C., Canada. '00
*Del Mar, Algernon, Min. Engr..... .....Bishop, Inyo Co., Cal. '93
*De Lury, Justin S., Asst. Prof. of Geol., Univ. of Idaho, Moscow, Idaho. '10
*Delprat, G. D., Min. Engr. and Genl. Mgr., Broken Hill Proprietary Co., Ltd., Broken Hill, New South Wales, Australia. '90
†Demarest, William G.....559 W. 156th St., New York, N. Y. '04
*Demond, Charles D., Testing Engr., Anaconda Copper Mining Co., 704 Main St., Anaconda, Mont. '94
*Dempster, William, Min. and Met. Engr., 1 Kings Park Ave., Mount Florida, Glasgow, Scotland. '01
*DeNeufville, Dr. Rudolph, Bockenheimeranlage 45, Frankfort a/M., Germany. '02
*Denman, Heber, Vice-Prest., Bache-Denman Coal Co., Fort Smith, Ark. '01
*Dennis, Clifford G., Min. Engr., San Francisco Exploration Co., 1022 Crocker Bldg., San Francisco, Cal. '07
*Dennis, Francis J., Min. Engr.....Crocker Bldg., San Francisco, Cal. '99

*Dennis, William B., Vice-Prest. & Genl. Mgr., Carlton & Coast R. R. Co., Carlton, Ore. '03
*Denny, Harry S.... .....32 Cinco de Mayo, Mexico City, Mexico. '05
*Denton, Fred. W., Min. Engr.....Painesdale, Mich. '92
*Derby, Charles C.....Nevada City, Cal. '99
*Derby, Harry S., Lawyer, 502 Peoples Savings Bank Bldg., Sacramento, Cal. '06
*Derby, Orville A., Servico Geologico è Mineralogéro do Brazil, Praia Vermelha, Rio de Janeiro, Brazil, So. America. '02
*De Saulles, Arthur B.....507 Delaware Ave., South Bethlehem, Pa. '71
*Deshler, George O., Min. Engr.....Dunnfield, Warren Co., N. J. '13
*Desloge, Firmin V., Min. Engr., Supt., Desloge Consolidated Lead Co., Desloge, St. Francois Co., Mo. '03
*Detert, William F., Min. Supt.....Jackson, Amador Co., Cal. '99
*Devereux, James H., Min. Engr.....60 Broadway, New York, N.Y. '89
*Devereux, W. B., Cons. Min. Engr.....60 Broadway, New York, N. Y. '80
*Devereux, Walter B., Jr., Min. Engr., 60 Broadway, New York, N. Y. '11
*Devereux, William G., Min. Engr., Melones Mining Co., Melones, Cal. '06
*De Vore, E. H., Min. Engr. and Geol., 205 Mills Bldg., El Paso, Texas. '07
*Dewey, C. E.....1213 First National Bank Bldg., Denver, Colo. '93
*Dewey, Frederic P., Assayer to the Mint Bureau.....Washington, D. C. '77
*Dewey, William P.....2656 Vermont Ave., Los Angeles, Cal. '85
*De Wolf, Frank W., Geol., State Geological Survey.....Urbana, Ill. '09
*Diaz-Ossa, Ignacio, Met. Engr., Escuela de Mineria, La Serena, Chile, So. America. '08
*Dick, James C., Genl. Supt., Cons. Mercur G. M. Co., P. O. Box 1418, Salt Lake City, Utah. '08
*Dick-Cleland, Archibald F., Min. Engr., Apartado 270, Guadalajara, Jal., Mexico. '09
†Dickenson, Francis M., Secy., Broken Hill Prop. Co., Ltd., Equitable Bldg., Melbourne, Victoria, Australia. '95
*Dickerman, Alton L., Min. Engr.....70 State St., Boston, Mass. '88
*Dickerman, William C., Vice-Prest., Am. Car & Foundry Co., 165 Broadway, New York, N. Y. '12
*Dickerson, Winchester, Min. Engr.....P. O. Box 329, Helena, Mont. '87
*Dickinson, Edmund S., Min. Engr.....Florence, Wis. '09
*Dickinson, Harold T., Min. Engr., Asst. Mgr., De Beers Cons. Mines, Ltd., Kimberley, So. Africa. '02
*Dickman, Robert N., Min. Engr.....1140 The Rookery, Chicago, Ill. '89
*Dickson, Archibald A. C., Cons. Min. Engr.....Kodarma, E.I.R., India. '06
*Dickson, John F., Prest., Dickson Car Wheel Co., 1216 Main St., Houston, Texas. '08
*Dieffenbach, Emil E., Met.....45 Hedden Terrace, Newark, N. J. '07
*Dieffenbach, H. M., Director, Peñoles Mining Co., Apartado 793, Mexico City, Mexico. '02
*Diehl, Ambrose N., Supt. Blast Fur., Carnegie Steel Co., Duquesne, Pa. '02
*Diescher, Alfred J., Min. Engr., 2124 Farmer's Bk. Bldg., Pittsburg, Pa. '06
*Dietz, Carl F., Cons. and Met. Engr., 8 Westland St., Worcester, Mass. '10
*Diggles, Robert N., Cyanide Chem. and Met., 309 Chicago Ave., Oakland, Cal. '00
*Dilworth, John B., Min. Engr.....506 Walnut St., Philadelphia, Pa. '05
*Dimmick, Frederick D., J. K. Dimmick & Co., New Land Title Bldg., Philadelphia, Pa. '04

**Dingwall, W. B. A., Min. Engr., Apartado 16, Matehuala, S. L. P., Mex. '97
**Dinkey, Charles E., Genl. Supt., Edgar Thomson Steel Works, Braddock, Pa. '87
**D'Invilliers, Edward V., Min. Engr. and Geol., Rooms 9–10, 506 Walnut St., Philadelphia, Pa. '82
*Disbrow, Wallace F., Min. Engr.....1108 Foster Bldg., Denver, Col. '09
*Divine, Richard D., Chem....Amer. Smelt. & Refin. Co., So. Chicago, Ill. '95
*Dixon, A. Faison, Min. Engr., Barber Asphalt Paving Co., Land Title Bldg., Philadelphia, Pa. '11
*Dixon, Alexander G., Min. Engr., Sombrerete Mining Co., Sombrerete, Zac., Mexico. '04
**Dixon, James T., Min. Engr., "Duasdale," Mulgrave Rd., Sutton, Surrey, England. '99
*Dixon, Samuel, Mine Mgr.....Macdonald, W. Va. '97
*Doak, Samuel E., Min. Engr.....Princess Furnace Co., Glen Wilton, Va. '12
*Doane, W. H., Prest., J. H. Fay & Co., 4th Natl. Bank Bldg., Cincinnati, O. '90
*Dobbs, Gerald G., Min. Engr.....P.O.Box 97, Bessemer, Ala. '11
*Doble, William A., Chief Engr., Pelton Water Wheel Co., 19th and Harrison Sts., San Francisco, Cal. '94
*Dockery, Love A., Min. Engr.....Ashton & Dockery, Chihuahua, Mexico. '00
**Dodge, Cleveland H., Phelps, Dodge & Co., 99 John St., New York, N. Y. '02
*Dodge, David C., Retired.....Denver, Colo. '11
*Dodge, Edgar V., Min. Engr.....P. O. Box 93, Tonopah, Nev. '08
*Dodge, James M., Prest., Link-Belt Engrg. Co., Nicetown, Philadelphia, Pa. '94
*Dodge, William F., Cons. Min. Engr., Bennett Bldg., Wilkes-Barre, Pa. '11
*Doeltz, J. G. F. Otto, Prof. of Met., Technische Hochschule Berlin, Charlottenburg, Prussia, Germany. '02
*Doerr, Albert, Min. Engr.....1632 Fletcher Ave., So. Pasadena, Cal. '97
*Dominian, Leon, Min. Engr., Care Am. Geographical Soc., 156th St. and Broadway, New York, N. Y. '06
*Donald, William, Assayer and Chem., Care Dr. Lucius Pitkin, 47 Fulton St., New York, N. Y. '00
*Donnelly, Thomas F., Min. Engr....412 W. 149th St., New York, N. Y. '07
*Donner, W. H.....721 Frick Bldg., Pittsburg, Pa. '06
*Donnewald, Albert H.....3709 Finney Ave., St. Louis, Mo. '07
*Donohue, Patrick J., Mgr. and Director, Talisman Mining Co., 66 W. 3d South St., Salt Lake City, Utah. '97
*Doolittle, Charles H.....508 McCornick Block, Salt Lake City, Utah. '96
†Dorflinger, Charles H., Glass Mfr.....White Mills, Pa. '93
**Dorion, Fernand J., Cons. Min. and Met. Engr., 24 Rue Alain Chartier, Paris, France. '96
*Dorr, John Van N., Met. Engr., 733 First National Bank Bldg., Denver, Colo. '01
*Dorrance, Charles, Jr., Fuel Engr., Old Company's Club, Lansford, Pa. '11
*Dougherty, J. W.....Oliver Bldg., Pittsburg, Pa. '91
Douglas, Dr. James.....99 John St., New York, N. Y.
*Douglas, James S., Miner.....Douglas, Ariz. '10
*Douglas, Theodore, Met.....80 Maiden Lane, New York, N. Y. '01
*Douglas, Walter, Genl. Mgr., Copper Queen Cons. Min. Co., Bisbee, Ariz. '92
*Douglass, Ross E., Min. Engr., Care Braden Copper Co., Rancagua, Chile, So. Am. '06
*Dowe, John H., Min. Engr., 9 Rose Mount, Wallington, Surrey, England. '08

*Dowler, Harry P., Genl. Supt., Penn-Mary Coal Co.....Heilwood, Pa. '13
*Dowling, Walford R., Cyanide Mgr., P. O. Box 143,
Knights Deep, Transvaal, South Africa. '06
*Downer, Roger H., Assayer, Chem., Downer Bros.....Goldfield, Nev. '02
*Downs, Carleton R., Supt., Bunker Hill Cons. Min. Co., Amador City, Cal. '00
†Downs, Walter E., Secty., The Amador Electric Railway & Light Co.,
Sutter Creek, Amador Co., Cal. '99
*Dows, David, Ore Concentration, American Gröndal Co.,
50 Church St., New York, N. Y. '12
*Dozier, Charles T.....P. O. Box 400, Redding, Cal. '02
*Draeger, Bernhard, Mfr. of Breathing Apparatus
for Mining Rescue Work, Draegerwerk, Lübeck, Germany. '09
*Drake, Augustus W.....687 N. Church St., Hazleton, Pa. '08
*Drake, Francis, Min. Engr.,
P. O. Box 249, Bulawayo, Rhodesia, So. Africa. '87
*Drake, Frank.....Room 712, 79 Milk St., Boston, Mass. '91
**Drake, Noah F., Geol. and Min. Engr.....Fayetteville, Ark. '98
*Draper, Carl H., Mill and Cyanide Supt., Mesquital Mining Co.,
Apartado 157, Guadalajara, Jal., Mexico. '06
*Draper, Fred. W.....Care Verk Isetz Corpn., Ekaterinburg, Russia. '02
*Draper, James C., Min. Engr.....Miners' Bank Bldg., Joplin, Mo. '05
*Draper, Robert M.....Box 83, Chrome, N. J. '00
*Dresser, Clarence G., Min. Engr.....P. O. Box 257, Hayden, Ariz. '08
*Drew, Charles V., Care Cerro de Pasco Mining Co.,
15 Broad St., New York, N. Y. '06
*Drinker, Henry S., President, Lehigh University, South Bethlehem, Pa. '71
*Drum, Frank G.....704 West Coast Life Bldg., San Francisco, Cal. '04
*Drummond, John J.....Care Canada Iron Corpn., Ltd., Montreal, Canada. '93
*Drummond, Thomas J., Iron Mfr., Dir. Canada Iron Furnace Co., Ltd.,
Montreal, Canada. '94
**Drummond, Thomas R., Mine Surveyor.....Miami, Ariz. '89
*Drury, Walter M., Min. Engr.,.....Mills Bldg., El Paso, Tex. '04
**DuBois, Prof. Aug. Jay.....New Haven, Conn. '75
*DuBois, Ernest, Mgr., Mexican Gold & Silver Recovery Co., Ltd.,
P. O. Box 5115, Mexico City, Mexico. '04
*DuBois, Howard W., Min. Engr.....302 Harrison Bldg., Philadelphia, Pa. '94
*Duck, George F., *Mines and Minerals*.....Scranton, Pa. '11
*Dudgeon, Norman M....7 Great Winchester St., London, E. C., England. '02
*Dudley, Harry C., Min. Engr.,.....807 Lonsdale Bldg., Duluth, Minn. '08
*Dudley, P. H., N. Y. Central & Hudson River R. R.,
Grand Central Terminal, New York, N. Y. '75
**Dudley, William L., Prof. Chem., Vanderbilt University, Nashville, Tenn. '84
*Duffield, Morse S., Min. Engr., Duffield & Jeffs,
416 Felt Bldg., Salt Lake City, Utah. '08
*Duffield, Will Ward, Civ. and Min. Engr.....Harlan, Ky. '06
*Duffin, James, Asst. Supt. of Mine,
Box 204, Chivatera, Cananea, Son., Mexico. '09
*Dufourcq, Edward L., Min. Engr., Produce Exchange, New York, N. Y. '93
*Dufourcq, Raoul G., Min. Engr., Supt., Montezuma Lead Co.,
Santa Barbara, Chih., Mexico. '09
*Dull, A. J., Coal, Iron, etc.....101 S. Front St., Harrisburg, Pa. '11

*Dumble, Edwin T., Geol., So. Pac. Ry. Co., 2003 Main St., Houston, Texas. '90
**Dumont, John M.....1434 Humboldt St., Denver, Colo. '82
*Duncan, Gordon S., Min. Engr., 28 St. Swithins Lane, London, E. C., England. '11
*Duncan, Gustavus A., Min. Engr.....Nelson, Lincoln Co., Nev. '02
*Duncan, M. M., Mine Mgr., Cleveland Cliffs Iron Co.....Ishpeming, Mich. '84
*Dunham, Lewis A., Cons. Engr.....42 Broadway, New York, N. Y. '99
*Dunham, Lewis E., Mgr.....M. A. Hanna & Co., Cleveland, Ohio. '90
*Dunkin, Damon D., Oklahoma School of Mines and Met., Wilburton, Okla. '06
*Dunkle, George F., Min. Engr.....Philipsburg, Pa. '05
†Dunlap, Thomas.....P. O. Box 298, Doylestown, Pa. '81
*Dunn, Robert I., Min. Engr.....3336 37th Ave., So., Seattle, Wash. '07
*Dunn, William R., Mine Mgr.....Easton, Pa. '06
*Dunshee, B. H., Supt. of Mines.....Box 415, Butte, Mont. '90
*Dunstan, Alfred J., Min. Engr., Genl. Mgr., Hyloe Copper Mines, Adaminaby, N. S. W., Aust. '90
*Dunstan, Simon P., Mine Owner and Mgr., Hacienda Quichas, Oyon, via Cerro de Pasco, Peru, S. A. '11
**Dunster, Carl B., Min. Engr.....Marquette, Mich. '07
*Dunyon, Newton A., Mng. Dir., Scranton Min. & Smelting Co., 721 McIntyre Bldg., Salt Lake City, Utah. '98
*DuPont, T. C., Explosives.....Wilmington, Del. '97
*Durant, Henry T., Cons. Met., Min. and Met. Club, 3 London Wall Bldgs., London, E. C., England. '02
*Durell, Charles T.....P. O. Box 631, Denver, Colo. '03
*Durfee, Elmer W., Mgr., Alvarado Gold Mining Co., Congress Jc., Ariz. '07
*Durham, Edward B., Min. Engr.....Univ. of California, Berkeley, Cal. '00
*Durkee, Frank W., Chem.....Tufts College, Mass. '11
**Dutton, Charles E., Min. Engr.....P. O. Box 104, Goldfield, Nev. '11
*Dutton, William F., Lawyer, Cons. Engr., 8 Maple Ave., Ellenville, N. Y. '07
*Dwelle, Jesse E., Min. Engr., Empire Zinc Co., 703 Symes Bldg., Denver, Colo. '98
**Dwight, Arthur S., Min. Engr., Met....25 Broad St., New York, N. Y. '85
*Dwight, Edmund W., Treas., Kingston Coal Co., 407 Sansom St., Philadelphia, Pa. '04
*Dwight, Theodore, Prest., Mineral Development Co., 15 Broad St., New York, N. Y. '92
*Dyckerhoff, Oscar L. W., Genl. Mgr., Deutsche Montan-Gesellschaft M. b. H., Victoria Str., 13, Wiesbaden, Germany. '04
*Dyott, George M., Elec. Engr.....1737 Broadway, New York, N. Y. '07
*Dyson, James, Civ. and Min. Engr., U. S. Deputy Mineral Surveyor, 1437–1447 Reese St., Silverton, Colo. '00
**Dyson, Thomas Ingleby, Met., Care Aust. Inst. of Min. Engrs., 57 Swanston St., Melbourne, Victoria, Aust. '97

*Eads, Norris E., Mine Supt.....Doyle Block, Victor, Colo. '05
*Eagan, Charles E., Min. Engr.....11 Broadway, New York, N. Y. '04
*Earle, Frank C., Mgr., El Paso Smelting Works, Kansas City Smelting & Refining Co., El Paso, Texas. '84
*Earle, Theodore, Min. Engr.....Brewster, N. Y. '12
*Earling, Roy B., Min. Engr., Efficiency Engr., Arizona Copper Co., Clifton, Ariz. '11

*Early, Charles H., Mine Mgr., Kamfersdam Diamond Mining Co., Kimberly, So. Africa. '04
*Easley, George R. D., Sampler and Assayer, Hotel Perrine, Twin Falls, Idaho. '07
*Easton, Harry D., Min. Engr.....430 Transylvania Park, Lexington, Ky. '06
*Easton, Stanley A., Min. Engr., Mgr., Bunker Hill and Sullivan Mining and Concentrating Co., Kellogg, Idaho. '98
*Eaton, Albert L., Asst. Supt., Chihuahua Mining Co., Chihuahua, Mex. '06
*Eaton, Lucien, Min. Engr., Supt., Cliffs Shaft, Moro & Salisbury Mines, Ishpeming, Mich. '01
*Eavenson, Howard N., Chief Engr., U. S. Coal and Coke Co., Gary, McDowell Co., W. Va. '00
*Eberhardt, William G., Min. Engr..... .....Ridgefield Park, N. J. '00
*Eckfeldt, Howard, Prof. Min. Engineering, Lehigh University, So. Bethlehem, Pa. '02
*Ede, J. A., Min. Engr.....La Salle, Ill. '93
*Edelen, Alexander W., Mine Supt., Angangueo Unit of Am. Smltg. & Refg. Co., Angangueo, Mich., Mexico. '08
*Edelsteen, Karl J., Min. and Civ. Engr.,.....Tromso, Norway. '11
*Ederheimer, Leopold.....Address wanted. '11
*Edison, Thomas A., Elect. Engr. and Inventor.....Orange, N. J. '89
*Edmondson, Horace W.....6050 Carlton Way, Hollywood, Cal. '06
*Edsall, Burroughs, Min. Engr.....Benton, Mono Co., Cal. '04
*Edwards, Adelbert D., Mine Cashier, Atlantic Mining Co., Atlantic Mine, Mich. '95
**Edwards, J. Warner.....318 Fourteenth St., Denver, Colo. '76
*Edwards, Richard M., Min. Engr.....Houghton, Mich. '86
*Edwards, Robert L., Min. Engr.....Ulysses, Idaho. '04
**Edwards, Victor E., Mech. Engr., Vice-Prest., Morgan Construction Co., Worcester, Mass. '06
**Edwards, William S.....110 E. 14th St., Tucson, Ariz. '93
†Eggers, John H., Jr.....Address wanted. '08
*Ehle, Mark, Jr., Prof. of Mining, South Dakota School of Mines, Rapid City, S. D. '06
*Eilers, Anton.....751 St. Mark's Ave., Brooklyn, N. Y. '71
*Eilers, Karl.....435 Riverside Drive, New York, N. Y. '88
*Eissler, Emanuel, Min. Engr.....Instructed to hold all mail. '93
*Elder, George R., Vice-Prest., Ingersoll-Rand Co..... Easton, Pa. '06
*Eldred, Byron E., Prest., Commercial Research Co.....Tuckahoe, N. Y. '10
*Elgin, William J., Civ., Min. Engr., Supt. Winding Gulf Colliery Co., Winding Gulf, W. Va. '04
*Elguera, Manuel, Min. Engr., Calle Washington 200, Lima, Peru, So. America. '92
†Elkan, Benno, Mgr., Am. Branch, Beer, Sondheimer & Co., 42 Broadway, New York, N. Y. '12
*Ellam, A. Spencer, Cons. Min. Engr., 30 Birbeck Rd., Acton, London, W., England. '06
*Ellerbeck, T. R., Mgr., Utah Fire Clay Co., 53 W. Second South St., Salt Lake City, Utah. '95
*Elliot, John L., Mining.....54 New Broad St., London, E. C., England. '98
**Elliott, Arthur H., Cons. Engr., Chem., 165 Broadway, New York, N.Y. '95
*Elliott, John S., Civ. and Min. Engr...61 E. 86th St., New York, N. Y. '03

*Elliott, Ray Holliday, Min. Engr., Mine Supt., Liberty Bell G. M. Co., Telluride, Colo. '12
*Elliott, Stuart R.....Care Cleveland Cliffs Iron Co., Negaunee, Mich. '06
*Ellis, Edwin E., Min. Geol., Tennessee Coal, Iron & Railroad Co., 1515 Brown-Marx Bldg., Birmingham, Ala. '07
*Ellis, Ernest W., Asst. Testing Engr., Washoe Smelter, 423 Elm St., Anaconda, Mont. '13
*Ellis, Henry R., Min. Engr.....148 Pierpont St., Salt Lake City, Utah. '98
*Ellis, Ralph W., Cons. Min. Engr., Apartado 5317, Mexico City, Mexico. '02
*Ellsworth, Lincoln, Topographer.....18 E. 53d St., New York, N. Y. '04
*Elmer, James M.....United Mines Corp., Tuolumne, Cal. '99
*Elmer, William W., Cons. Min. Engr...614 Wilcox Bldg., Portland, Ore. '98
*Elton, Howard L., Cons. Engr.....Oaxaca, Oaxaca, Mexico. '06
*Ely, Theodore N.....Bryn Mawr, Pa. '79
*Emanuel, Louis V.....165 Rector St., Perth Amboy, N. J. '00
*Emeis, Walter A., Min. Engr.....120 Oneida Ave., Davenport, Ia. '04
*Emerson, Edward H., Min. Engr., Cuba Copper Co., Santiago de Cuba, Cuba. '12
*Emery, A. B., Mgr., La Fe Mining Co.....Guadalupe, Zac., Mexico. '02
*Emlaw, Harlan S., Engr.....1140 Bergen St., Brooklyn, N. Y. '98
*Emmel, Rudolph, Min. Engr.....Ludwig, Nev. '11
*Emmens, Newton W., Min. Engr., 505 Metropolitan Bldg., Vancouver, B. C., Canada. '03
*Emmerich, L. O., Min. Engr.....Hazleton, Pa. '94
*Emmerton, F. A., Anal. Chem. and Met., 9 Bratenahl Bldg., Cleveland, O. '84
†Emmons, Arthur B.....Newport, R. I. '85
*Emmons, Carolus D., Mining.....156 E. 11th St., Eugene, Ore. '07
*Emmons, Nathaniel H., Cons. Min. Engr., North Butte Mining Co., P. O. Box 584, Butte, Mont. '93
*Emmons, William H., Geol., U. S. Geological Survey, Washington, D. C. '07
*Emtage, Raymond H., Civ. Engr., Watkins, St. Michael, Barbados, W. I. '08
*Engel, George W., Chief Min. Engr., Coal Cos., Box 540, Scranton, Pa. '11
*Englehardt, Ernest C., Met., Supt., Idaho Smelting & Mining Co., Clayton, Idaho. '95
*Enos, Herbert C., Min. Engr.....Apartado 1583, Mexico City, Mexico. '13
*Enzian, Charles, Min. Engr., U. S. Bureau of Mines, Wilkes-Barre, Pa. '11
†Eppley, Marion, Banker and Broker.....80 Broadway, New York, N. Y. '12
*Erdlets, Joseph F., Jr., Min. Engr.....52 Broadway, New York, N. Y. '08
*Escher, Frank.....Rigistr. 39, Zurich IV., Switzerland. '99
†Eshelman, S. Kendrick, Jr., Steel and Iron, P. O. Box 16, Leaman Place, Pa. '12
*Espinosa, Luis.....3a Gabino Barreda 56, Mexico City, Mexico. '02
*Esselstyn, John N., Min. Engr.....2330 Downing Ave., Denver, Colo. '97
*Esterly, George M., Mining.....Valdez, Alaska. '04
**Eu, Siang Hye, Supt. of Mines for Eu Tong Sen, Kampar, Perak, Federated Malay States. '11
**Eurich, E. F., Met. Engr.....15 William St., New York, N. Y. '74
*Eustice, Richard, Engr.....Austral Terrace, Malvern, So. Australia. '10
†Eustis, Augustus H., Min. Engr.....131 State St., Boston, Mass. '02
*Eustis, Frederick A., Min. Engr.....P. O. Box 1422, Boston, Mass. '02
*Eustis, William E. C., Mining and Smelting, 131 State Street, Boston, Mass. '76

*Evans, David T., Genl. Mgr., Mt. Carbon Co., Ltd.....Powellton, W. Va. '99
*Evans, George S., Cons. Min. Engr., Care Mrs. J. Harris,
West Horsley, near Leatherhead, Surrey, England. '09
*Evans, George W., Min. Engr., Chief of Coal Surveys, Washington
Geological Survey, 423 New York Block, Seattle, Wash. '07
*Evans, Herbert A., Min. Engr., Care London & Pacific Petroleum Co.,
Negtitos, near Paita, Peru, So. America. '94
*Evans, S. G., Min. Engr.....1224 Fairmont St., N. W., Washington, D. C. '00
*Eveland, Arthur J., Min. Engr., Econ. Geol.,
Care Hornblower & Weeks, 60 Congress St., Boston, Mass. '03
*Evered, Nutcombe J....Care J. D. Evered, Medicine Hat, Alta., Canada. '04
†Ewing, Charles G., Miner.....St. Regis Apts., St. Louis, Mo. '08
*Ewing, Harry E., Transitman.....P. O. Box 71, Jenkinjones, W. Va. '10
*Eye, Clyde M., Concheno Mining Co.....Temosachic, Chih., Mexico. '98
*Eynon, David L. L., Supt., Roll Dept., Homestead Steel Works,
Munhall, Pa. '02
*Eynon, Thomas M., Prest., The Eynon-Evans Mfg. Co.,
15th and Clearfield Sts., Philadelphia, Pa. '99

**Fackenthal, B. F., Jr., Prest., Thomas Iron Co.....Easton, Pa. '80
*Fackenthal, John S.....Easton, Pa. '87
*Fackenthal, Michael, Mgr., Peter Cooper Glue Factory,
930 St. Mark's Ave., Brooklyn, N. Y. '80
*Fairbairn, Alan J., Min. Engr., 89 Onslow Gardens, London, S. W., Eng. '02
*Fairbairn, Charles T.....Woodward Bldg., Birmingham, Ala. '05
*Fairbairn, George, Min. Engr.,
18 Welbeck Court, Kensington, London, W., England. '09
*Fairbank, Wallace, Min. Engr. and Met., 23 Washington Sq.,
New York, N. Y. '96
**Fairchild, Sidney A., Min. Engr., Apartado 65, Monterey, N. L., Mex. '93
**Fairchild, S. E., Jr., Civ., Min. Engr., 530 Land Title Bldg.,
Philadelphia, Pa. '98
*Falding, Frederic J., Cons. Chem. Engr...55 Broadway, New York, N. Y. '84
*Faneuf, Samuel C., Min. Engr.....Rosario, Sinaloa, Mexico. '07
*Farina, Raffaele, Min. Engr.....Lelant, Cornwall, England. '08
*Farish, Frederick G., Min. Engr.....603 Colorado Bldg., Denver, Colo. '06
*Farish, George E., Min. Engr., Motherlode Sheep Creek Mining Co.,
Sheep Creek, B. C., Canada. '05
*Farish, John B., Min. Engr.....25 Broad St., New York, N. Y. '88
*Farnum, Herbert C.....6929 Hawthorne Blvd., Los Angeles, Cal. '03
*Farrant, James C., Rep., Hardinge Conical Mill Co.,
563 Salisbury Ho., London, E. C., England. '12
*Farrar, Benjamin L.....352 Centre St., Bangor, Me. '06
*Farrell, Austin, Mgr., Blast Furnaces, Pioneer Iron Co., Marquette, Mich. '80
*Farrell, John H., Min. Geol.,
527 Union League Bldg., Los Angeles, Cal. '08
*Fassett, Charles M., Assayer and Met., Prest., C. M. Fassett Co.,
207 Wall St., Spokane, Wash. '95
**Fawcett, James H., Min. Engr., 31 Queen St., Melbourne, Victoria, Aust. '96
*Fawns, Sydney, Min. Engr., 26 Sussex Mansions, South Kensington,
London, S. W., England. '06
*Fay, Albert H., Min. Engr.....Bureau of Mines, Washington, D. C. '02

*Fearn, Percy L., Cons. Min. Engr., Care United Mines Co., 17 Battery Place, New York, N. Y. '89
*Fegraeus, Tobern.....Chief Geol., Nobel Works, Baku, Caucasus, Russia. '02
*Feldtmann, W. R., Cons. Min. Engr., 138 Salisbury House, London, E. C., England. '91
*Fell, E. Nelson, Min. Engr.....“Creedmore,” Warrenton, Va. '00
*Felton, Edgar C., Prest., Pennsylvania Steel Co., 300 Girard Bldg., Philadelphia, Pa. '81
*Fenner, Charles H., Min. Engr., 619 Trust & Savings Bldg., Los Angeles, Cal. '11
*Fenner, Clarence N., Min. Engr., Geophysical Laboratory, Washington, D. C. '96
*Fera, Cesare, Engineer, Società Siderurgica.....Savona, Italy. '04
*Fergie, Charles, Min. Engr., 1025 Transportation Bldg., Montreal, Canada. '93
*Fergie, George, Min. and Civ. Engr.....Copiapo, Chile, So. America. '04
*Ferguson, Claude, Min. Engr.....Caldwell, Idaho. '12
*Ferguson, Donald, Cons. Min. Engr.....Address wanted. '06
**Ferguson, Henry G., Geol., U. S. Geological Survey, Washington, D. C. '06
*Ferguson, Vincent, Resident Mgr., U. S. Cast Iron Pipe and Foundry Co., Bessemer, Ala. '91
*Ferguson, Walton, Merchant.....15 William St., New York, N. Y. '79
*Fergusson, Hugh B., Min. Engr.....Address wanted. '04
*Fernau, John J. C., Civ., Min. Engr., “Altamont,” Thurlow Parr Rd., West Dulwich, London, England. '06
††Fernow, B. E., Dean, Faculty of Forestry, Univ. of Toronto, Toronto, Ont., Canada. '87
**Ferraris, Erminio, Min. Engr.....Monteponi, Sardinia, Italy. '08
*Ferrier, Walter F., Min. Geol., 204 Lumsden Bldg., Toronto, Ont., Canada. '99
*Feustman, L. P., Vice-Prest., International Steam Pump Co., 115 Broadway, New York, N. Y. '82
*Fevre, Lucien F., Ingenieur et Chef des Mines, 1 Place Possoz, Paris XVIe, France. '03
*Field, Frederick M.....2343 W. 31st St., Los Angeles, Cal. '00
*Field, Herbert E., Met....Care Mackintosh-Hemphill Co., Pittsburg, Pa. '03
*Fielding, Charles W., Min. Engr., “Belmont,” Faversham, Kent, Eng. '99
*Fies, Milton H., Genl. Supt. of Mines.....R. F. D. 1, Josper, Ala. '10
*Figari, Alberto, Min. Engr .....Apartado 516, Lima, Peru, So. America. '91
*Finch, H. Wynne, Min. Engr., The Atheneum, Pall Mall, London, S. W., England. '98
*Finch, John W., Min. Engr.....730 Symes Bldg., Denver, Colo. '00
*Fink, William N., Min. Engr., San Toy Mining Co., Santa Eulalia, Chih., Mexico. '05
*Finlay, James R., Min. Engr.....52 William St., New York, N. Y. '95
*Finletter, John R., Mining...625 St. Francis Hotel, San Francisco, Cal. '09
*Finley, Walter H.....Middlesboro, Ky. '03
*Firmstone, Frank.....Easton, Pa. '71
*Firmstone, Harry, Prest., Longdale Iron Co., Room 522, 608 Chestnut St., Philadelphia, Pa. '75
*Fishburn, Randolph E., Min. Engr.....Schrader Bldg., Tucson, Ariz. '00
*Fisher, Howell, Chem. Engr.....19 Orkney Road, Brookline, Mass. '08
*Fisher, Howell T., Civ., Min. Engr., 411 Dorchester St., W., Montreal, Canada. '11

*Fisher, Norman R., Cons. Engr., Temiskaming Min. Co., Cobalt, Canada. '07
*Fisher, Thomas, Genl. Supt., Berwind-White Coal Mining Co., 1100 Arcade Bldg., Philadelphia, Pa. '89
*Fisher, William B., Min. Engr.....Davis-Daly Copper Co., Butte, Mont. '92
**Fitch, Max B.....2730 Raymond Ave., Los Angeles, Cal. '98
*Fitch, Walter, Prest., Genl. Mgr., Chief Cons. Min. Co., Eureka, Utah. '05
*Fitzgerald, J. Morton.....706 Continental Trust Bldg., Baltimore, Md. '01
*Fitzhugh, Edward F., Min. Engr., Mgr., Idaho-Elkhorn Mining Co., Idaho City, Idaho. '07
*Fitzsimmons, Francis J., Engr.....Instructed to hold all mail. '98
*Flagg, Arthur L., Min. Engr.....287 Highland Ave., Providence, R. I. '12
*Flagg, Stanley G., Jr.....1421 Chestnut St., Philadelphia, Pa. '92
*Flaherty, Robert H., Min. Engr., Mackenzie, Mann & Co., 9 Toronto St., Toronto, Ont., Canada. '93
*Fleming, Edward P.....Braden Copper Co., Rancagua, Chile, So. Am. '02
*Fleming, Henry S., Cons. Engr.....1 Broadway, New York, N. Y. '03
*Fleschhutz, John C., Min. Engr.....Central City, Colo. '03
*Fletcher, Charles R., Min. Engr., 402 Stimson Bldg., Los Angeles, Cal. '85
*Flinn, Frederick B., Chem.....P. O. Box 91, Newark, N. J. '07
**Flynn, Francis N., Met.....Arizona Copper Co., Ltd., Clifton, Ariz. '98
*Fogh, H. P.....1403 Howell St., Seattle, Wash. '99
**Fohr, Franz, Min. Engr. and Met.....132 Nassau St., New York, N. Y. '75
*Fohs, F. Julius, Min. Geol. and Engr.....416 Rose Lane, Lexington, Ky. '04
*Folsom, David M., Min. Engr.....Stanford University, Cal. '10
*Foote, Arthur B., Asst. Supt., North Star Mines Co., Grass Valley, Cal. '05
*Foote, Arthur De W., Civ. Engr., Genl. Mgr., North Star Mines Co., Grass Valley, Cal. '00
*Foote, Emerson L.....5833 Bartmer Ave., St. Louis, Mo. '82
*Foote, William B., Min. Engr., Blast Furn. Supt., 24 Sherrill St., Geneva, N. Y. '09
*Forbes, David L. H., Min. and Met. Engr., 306 Mining Chambers, Toronto, Ont., Canada. '04
**Forbes, Donald G., Min. Engr., Met., Union Club, Victoria, B. C., Canada. '94
*Forbes, Paul R., Met.....15 William St., New York, N. Y. '95
*Ford, Edward L., Genl. Mgr., Youngstown Steel Co.....Youngstown, Ohio. '79
*Fordyce, John R., Prest., Thomas Fordyce Mfg. Co.....Little Rock, Ark. '92
*Forsyth, Robert, Cons. Engr.....1159 The Rookery, Chicago, Ill. '75
*Fortney, Carlton E., Min. Engr., Fenix Coal Co., Ltd., El Fenix, Coah., Mexico. '09
*Foster, Donald F., Met., Care Prestea Block A., Ltd., Secondi, Gold Coast, West Africa. '11
*Foster, Ernest Le Neve, Min. Engr.....The Perrenoud, Denver, Colo. '75
†Foster, George C., Student.....521 E. 18th St., Denver, Colo. '03
*Foster, Philip L., Min. Engr., The Exploration Company, Ltd., of London, 111 Broadway, New York, N. Y. '96
*Foster, Rufus J., Vice-Prest., International Text Book Co....Scranton, Pa. '90
*Foucar, Edouard L., Min. Engr., 512–18 Folsom St., San Francisco, Cal. '85
*Fowler, Samuel S., Cons. Engr., Genl. Mgr., New Canadian Metal Co., Ltd., Riondel, B. C., Canada. '92
*Fowles, Charles, Prest., Durango Min., Mill. & Explor. Co., San Lucas de Ocampo, Dur., Mexico. '07
**Fox, Alfred, Jr., Genl. Mgr. and Min. Engr., Care J. E. Harmsen, Caylloma Silver Mining Co., Arequipa, Peru, South America. '05

*Fox, Arthur C., Asst. Mgr., with A. P. Silliman.....Houghton, Mich. '08
*Fraizer, Isaac P., Min., Civ. Engr.....Elgin, Ariz. '07
**Frames, Minett E., Cons. Geol., Box 8, Johannesburg, Transvaal, S. A. '05
*Francis, Lewis W.....2 Rector St., New York, N. Y. '89
†Franck, Albert C., Min. Engr.....3807 Fourth St., San Diego, Cal. '04
*Franck, Robert P., Engr.....Citrus Soap Co., San Diego, Cal. '04
**Francklyn, Charles G., Vice-Prest., Central Union Gas Co.,
519 Courtlandt Ave., New York, N. Y. '80
*Frank, Albert, Min. Engr.....Instructed to hold all mail. '07
*Frank, Alfred, Civ., Min. Engr., Genl. Mgr., Ohio Copper Co.,
809 Newhouse Bldg., Salt Lake City, Utah. '03
*Franke, Emil A., Min. and Met. Engr., Assayer and Chem.,
914 Lakeside Pl., Chicago, Ill. '02
*Franke, Rudolf, Met. Engr., Dir., Smelting Operations, Mansfeld
Copper Mining & Smelting Co., Eisleben, Germany. '06
*Frantz, Joseph H., Blast Furnace Mgr., P. O. Box 751, Columbus, Ohio. '08
*Frasch, Herman, Prest., The Union Sulphur Co.,
17 Battery Pl., New York, N. Y. '93
*Fraser, Alexander, Met., Great Boulder Mine...Boulder, W. Australia. '04
*Fraser, Alexander J., Supt.....El Oro Mine, Old Glory, Ariz. '06
*Fraser, Colin, Care Bank of New Zealand, 1 Queen Victoria St.,
London, E. C., England. '06
*Fraser, Lee, Min. Engr.....Apartado 168, Ormo, Bolivia, So. America. '11
**Fréchette, Howells, Min. Engr., Mines Branch, Dept. of Mines,
Ottawa, Ont., Can. '12
*Frecheville, Robert J., Min. and Cons. Engr., 544 Salisbury House,
London, E. C., England. '84
**Frecheville, William, Min. Engr., "High Wykehurst,"
Euhurst, Guildford, England. '84
*Freeman, Ambrose W., Min. Engr., Challis House, Martin Place,
Sydney, New South Wales, Australia. '05
*Freeman, Gay N., Assayer and Anal. Chem.....Thermopolis, Wyo. '07
*Freeman, Stanton S., Supt. Furnaces, Carbon I. & S. Co., Parryville, Pa. '01
*French, L. H., Mining and Railroads..... New Rochelle, N. Y. '09
*Freymouth, William A., Econ. Geol., Umaria, Rewa State, Central India. '05
*Frick, H. C., Coke Mfr.....1924 Frick Bldg., Pittsburg, Pa. '79
*Fricke, John H., Mining .....Bisbee, Ariz. '88
*Friedlander, Otto A., Mine Sampler, Ashanti Goldfields Corpn. Ltd.,
Obuasi, Gold Coast Colony, West Africa. '12
*Froehling, Henry, Chem. and Min. Engr., 911 Floyd Ave., Richmond, Va. '90
*Fuchs, Fernando C., Min. Engr., Sociedad de Ingenieros,
Apartado 981, Lima, Peru, So. America. '02
*Fudge, Thomas, Chem.....32 W. 38th St., Bayonne, N. J. '06
*Fujioka, Jokichi, Min. Engr., Supt., Mitsui Miike Coal Mines,
Chikugo, Japan. '07
**Fujita, Heitaro, Vice-Prest., Fujita Co., Dojima, Kita-Ku,
Osaka, Japan. '10
*Fukutome, Kinosuke, Chief of Mining Bureau,
Formosa Govt., Taipeh, Japan. '11
*Fuller, James W., Jr., Secy. and Treas., Lehigh Car Wheel &
Axle Wks., Catasauqua, Pa. '94
*Fuller, John T.....505 Park St., Honesdale, Pa. '09

*Fulton, Charles H., Prof. of Met., Case School of Applied Science, Cleveland, Ohio. '03
*Fulton, Chester A., Min. Engr.....University Club, Mexico City, Mexico. '07
*Fulton, John A., Min. Engr.....Melones, Cal. '12
*Furbeck, John P., Min., Civ. Engr.....462 E. 9th St., N., Portland, Ore. '10
*Furness, Dwight, Min. Engr., Prest., Dwight Furness Co., Apartado 2, Guanajuato, Mexico. '02
*Furniss, Thomas A., State Mine Inspector.....Punxsutawney, Pa. '12
**Furukawa, Toranosuke, Prest., Furukawa Mining Co., 10 Tsukiji Nichome, Tokyo, Japan. '08
*Fyfe, Alexander, Met.....Ventanas, via Chavarria, Dur., Mexico. '12

*Gage, Edward C., Min. Engr.....Chico, Butte Co., Cal. '05
**Gage, Eliphalet B.....Hermosa Beach, Cal. '99
*Gahl, Rudolf, Met.....Copper Queen Cons. Copper Co., Douglas, Ariz. '08
*Galan, Carlos F., Mining,.....Rioverde, S. L. P., Mexico. '12
*Galbraith, Malcolm M., Min. Engr., 1110 W. Jefferson St., Los Angeles, Cal. '09
*Gallagher, John H., Min. Engr.....1505 Yeon Bldg., Portland, Ore. '07
*Gallwey, Harry A., Gen. Mgr., Butte, Anaconda & Pacific Ry. Co., Anaconda, Mont. '05
*Galvin, Carroll D., Min. Engr.....1311 Franklin St., Oakland, Cal. '07
*Gamba, Fortunato P., Cons. Min. Engr., Tuquerres, Colombia, South America, via Panama y Tumaco. '07
*Gambrill, George T., Jr., Constr. Engr., Woodward Iron Co., Woodward, Ala. '07
*Gamm, Henry F. E., Chief Engr., Oil Furnace & Engineering Co., 60 Liberty St., New York, N. Y. '09
*Gannon, Michael H., Genl. Supt., Idaho-Continental Mines, Port Hill, Idaho. '12
*Gard, Irving R., Min. Engr., Canadian Collieries (Dunsmuir), Ltd., Victoria, B. C., Canada. '11
*Gardner, E. D., Min. Engr.....Forest Service, Missoula, Mont. '12
*Garfield, Alexander S., 67 Avenue de Malakoff, Paris, XVIe, France. '05
*Garlichs, Herman.....Everett Court, Newark, N. J. '89
*Garnier, Thomas R., Mining.....1735 Mission St., So. Pasadena, Cal. '12
*Garrey, George H., Min. Geol., Am. Smelt. & Refin. Co., 165 Broadway, New York, N. Y. '05
*Garrison, F. Lynwood, Min., Civ. Engr., Drexel Bldg., Philadelphia, Pa. '83
*Garthwaite, E. H.....391 Fairmont Ave., Oakland, Cal. '82
*Gartrell, Herbert W., Min. Engr...The University, Adelaide, So. Aust. '07
*Garvin, Charles J., Min. Engr.....1744 Broadway, Denver, Colo. '03
*Garvin, John M., Mgr., Bass Foundry & Machine Co.....Rock Run, Ala. '92
†Gary, Elbert H., U. S. Steel Corporation, 71 Broadway, New York, N.Y. '04
*Garza-Aldape, J. M., Min. Engr.....Torreon, Coahuila, Mexico. '05
*Gatch, Elias S., Genl. Mgr., Granby Mining & Smelting Co., 1710 Third Natl. Bank Bldg., St. Louis, Mo. '04
*Gatzmer, William C., Civ. and Mech. Engr.....Tacony, Philadelphia, Pa. '88
*Gay, Ware B., Mayo Land & Bridge Co.....Richmond, Va. '95
*Gayford, Ernest, Met.....159 Pierpont St., Salt Lake City, Utah. '11
*Gayley, James, Min. Engr. and Met.....71 Broadway, New York, N. Y. '80

*Gaylord, Frank B., Blast Furnace Mgr.,
58 Pomeroy Terrace, Northampton, Mass. '00
**Gazzam, Joseph P., Min. Engr..... 5027 Westminister Pl., St. Louis, Mo. '84
*Gee, Emerson, Cons. Engr., Supt., Mina "El Carmen,"
Sola de Vega, Oax., Mexico. '03
*Geiger, Arthur W.....87 Milk St., Boston, Mass. '06
*Geisendorfer, Henry A., Min. Engr., Supt.,
Arizona-Nevada Copper Co., Hillside, Ariz. '03
*Geismer, Henry S., Cons. Engr.,
Kaiser-Geismer Engrg. Co., Birmingham, Ala. '08
**Gemmell, Robert C., Asst. Genl. Mgr., Utah Copper Co.,
P. O. Box 1169, Salt Lake City, Utah. '03
**Gennes, A. A. de, Min., Civ. Engr.....2 Rue Mignet, Paris, France. '02
*Gennet, Charles W., Jr., Inspecting Engr.,
2200 Insurance Exchange Bldg., Chicago, Ill. '11
*Geoghegan, Robert H., Min. Engr.,
Rockfield, Blackrock Co., Dublin, Ireland. '05
*George, Harold C., Min. Engr.....Wisconsin Zinc Co., Platteville, Wis. '05
*George, John G. G., Min. Engr.....Esperanza, Son., Mexico. '09
*George, R. D., Prof. of Geology, University of Colorado.....Boulder, Colo. '02
*Geppert, Richard M., Min. Engr.,
Salisbury House, London, E. C., England. '02
*Gerhardt, Reginald B., Mech. Engr.....2143 Penn St., Harrisburg, Pa. '12
*Gerhauser, William, Secy., Superior Charcoal Iron Co.,
810 Penobscot Bldg., Detroit, Mich. '88
*Germann, Franz.....La Paz, Bolivia, So. America. '00
*Gibb, Allan, Min. Engr., Care Robert Williams & Co.,
Friars House, New Broad St., London, E. C., England. '00
*Gibbons, Charles A., Jr., Min. Engr., Central Chile Copper Co., Ltd.,
Panulcillo, Coquimbo, Chile, So. America. '11
*Gibbs, George H., Steel Wks. Engr. and Mgr.,
"Glan y Mor," Baglan, Briton Ferry, So. Wales, G. B. '12.
*Gibson, Thomas W., Dir. Bureau of Mines.....Toronto, Ont., Canada. '01
*Gifford, Stanley D., Min. Engr., United Copper Co.,
74 Broadway, New York, N. Y. '95
*Gilbert, Frederick C., Met., Am. Smltg. & Refg. Co.....Durango, Colo. '09
**Gilbert, G. K., Geol., U. S. Geological Survey.....Washington, D. C. '92
*Gilchrist, Archibald D., Prof. of Engrg., Royal Military College,
Duntroon, N. S. W., Australia. '10
*Gilchrist, John D.....1405 Downing St., Denver, Colo. '96
**Gilchrist, Percy C., Met., Reform Club, Pall Mall, London, S. W., Eng. '91
*Gilkerson, Harvey G., Min. and Civ. Engr., 318 Judge Bldg.,
Salt Lake City, Utah. '04
*Gillespie, F. Maury, Elec. Engr. and Supt. Motive Power, Abangarez
Gold Fields of Costa Rica, Abangarez, Costa Rica, C. A. '13
†Gillespie, T. A.....T. A. Gillespie & Co., 50 Church St., New York, N. Y. '86
†Gillet, Lorenzo M., Treas. and Secy., Hormiguero Central Co.,
69 Wall St., New York, N. Y. '93
*Gillette, H. P., Cons. Engr., *Engineering-Contracting*,
608 S. Dearborn St., Chicago, Ill. '03
*Gillie, John, Min. Engr., Anaconda Copper Mining Co.....Butte, Mont. '87
*Gilman, Charles E., Civ., Min. Engr., 406 Syndicate Bldg., Oakland, Cal. '07
*Gilson, Kenneth L., Genl. Supt., Arctic Coal Co....Trondhjem, Norway. '07

*Ginder, William H. H.....Pottsville, Pa. '00
*Gipps, Frederick deV., Min. Engr.....Mareeba, N. Queensland, Aust. '94
*Girault, Edmundo, Min. and Met. Engr.,
3a Calle Prim No. 56, Mexico City, Mexico. '98
*Glassbrook, Clarence I.....143 S. 12th East St., Salt Lake City, Utah. '02
†Gleason, Frank A., Spl. Min. Engr., D. L. & W. R. R.,
Coal Mining Div., 1911 Capouse Ave., Scranton, Pa. '08
*Gleeson, Walter G., Min. Engr.....Box 423, Baker City, Ore. '06
*Gleim, Edgar M., Min. Engr., Presidio Mining Co.....Shafter, Texas. '06
**Glenn, Leonidas C., Prof. Geol., Vanderbilt University, Nashville, Tenn. '00
*Glore, H. Gordon, Min. Engr., Humboldt Min. & Red. Co., Nogales, Ariz. '03
*Glover, George H., Jr., Steel Car Expert,
701 Madison Ave., New York, N. Y. '09
*Gmehling, Andreas, Prof. of Met., The University,
Santiago, Chile, So. America. '12
*Godfrey, John R., Care A. E. Oldham, Chancery Lane, Little Collins St.,
Melbourne, Victoria, Australia. '97
†Godley, George McM., Vice-Prest., Linde Air Products Co.,
79 Wall St., New York, N. Y. '98
*Godshall, Harvey H., Chem. and Min. Engr., Moselem Mining Co.,
Haas Bldg., Allentown, Pa. '00
*Godshall, L. D., Min. Engr., Met.....2892 Sunset Pl., Los Angeles, Cal. '94
*Goedicke. Carl, Mine Mgr.....P. O. Box 535, San Antonio, Texas. '12
*Goetter, Frederick B., Mill and Cyanide Supt.,
Mexican Candelaria Co., S. A., San Dimas, Dur., Mexico. '12
*Goldberg, Julius, Met. Engr.,
Kamennoostrov Ave. 9, St. Petersburg, Russia. '07
*Goldsworthy, Joseph, Min. Supt., P. O. Box 2079, No. Vancouver,
B. C., Canada. '11
*Goltra, Edward F., Mfr.....La Salle Bldg., St. Louis, Mo. '12
*Good, George McC. H., Min. Engr.....Osceola Mills, Pa. '87
*Goodale, Charles W., Min. Engr., Mgr., B. & M. Dept., Anaconda
Copper Mining Co., Butte, Mont. '76
*Goodale, Stephen L., Prof. of Met., Univ. of Pittsburg,
Grant Blvd., Pittsburg, Pa. '04
*Goodchild, William H., Cons. Met., Willoughby's Consolidated Co., Ltd.,
P. O. Box 220, Bulawayo, Rhodesia, So. Africa. '08
*Goode, Ewart N., Met., Mt. Morgan Gold Mining Co., Mt. Morgan,
Queensland, Australia. '11
*Goodland, Gilmore, Min. Engr., 17 Gracechurch St., London,
E. C., England. '99
*Goodloe, Meade, San Fernando Bldg., 4th and Main Sts.,
Los Angeles, Cal. '96
*Goodrich, Harold B., Geol.....450 W. 147th St., New York, N. Y. '12
**Goodrich, R. R., Prof. of Met., University of Arizona.....Tucson, Ariz. '88
*Goodsell, Charles H., Min. Engr., 818 Paulsen Bldg., Spokane, Wash. '13
*Goodwin, Robert H., Min. Engr., Care Messrs. C. W. Whittall & Co.,
Karabournau Mine, Smyrna, Turkey. '06
*Göransson, Karl F., Met.....Sandviken, Sweden. '01
**Gordon, Adam R., Supt. of Mines, N. Y. and Honduras
Rosario Mining Co., San Juancito, Honduras, C. A. '11

*Gordon, Ernest, Min. Engr., "Boswin," Porkellis, Helston, Cornwall, England. '05
*Gordon, Henry A., Civ., Min. Engr., "Ben Lemond," Ranfurly Rd., Epson, Auckland, New Zealand. '87
*Gordon, John, Miner and Merchant..22 So. Audley St., London, England. '00
*Gordon, Lyman F., Mfr., Care Wyman & Gordon Co., Worcester, Mass. '07
**Gordon, William D., Mgr., Mine & Smelter Supply Co., El Paso, Texas. '96
*Gordon-Firebrace, William E., Min. Engr., 812 Salisbury House, London Wall, London, E. C., Eng. '09
*Gormly, Samuel J., Min. Engr.....3063 E. 6th St., Los Angeles, Cal. '00
*Gorow, Boris, Mine Mgr.....Taxco, Guerrero, Mexico. '07
*Goss, Edward O., Asst. Treas.....Scovill Mfg. Co., Waterbury, Conn. '94
*Gottsberger, B. Britton, Min. Engr., Genl. Mgr., Miami Copper Co., Miami, Ariz. '01
*Gould, Hubert J., Min. Engr. and Met., 10 Castlereagh St., Sydney, New So. Wales, Australia. '04
Goupillière, Prof. Haton de la, 56 Rue de Vaugirard, Paris (VIe arrond.), France.
*Gouyard, Gustave M., Met.....260 Convent Ave., New York, N. Y. '96
*Gow, P. George, Mine Mgr.....1619 Walnut St., Berkeley, Cal. '99
*Grabill, Clarence A., Smelter Supt., Cia. Metalurgica Nacional, Matehuala, S. L. P., Mexico. '03
*Grace, Eugene G., Vice-Prest. & Genl. Mgr., Bethlehem Steel Co., South Bethlehem, Pa. '12
**Grace, William F., Min., Met. Engr., Genl. Mgr., Waihi Grand Junction Gold Co., Ltd., Waihi, Auckland, New Zealand. '95
*Gracey, Arthur H., Mine Mgr.....Nelson, B. C., Canada. '05
†Graef, Harry C., Prest., Montana & Mexico Mining Co., 29 Broadway, New York, N. Y. '12
*Graham, Stanley N.....Room 2, Manning Arcade, 24 King St., W., Toronto, Ont., Canada. '06
*Graham, Thomas W., Mgr., Iron and Steel Works, Mossbay House, Workington, Cumberland, England. '10.
*Grammel, Paul, Mgr., West Sumatra Mijnen Synd., Fort-de-Kock, Sumatra, Dutch East Indies. '09
*Grammer, F. Louis.....Leesburg, Va. '92
**Grammer, William S., Min. Engr.....Leesburg, Va. '03
**Granger, Arthur O.....Cartersville, Ga. '91
*Granger, Henry G., Min. Engr.....Cartagena, Colombia, So. America. '95
*Gränstrom, Gustaf A., Min. Engr.....Sala, Sweden. '98
*Grant, George H., Geol. and Min. Engr., Care Capt. Wm. Grant, Point Ellice, Victoria, B. C., Canada. '01
*Grant, Robert J., Min. Engr.....815 E. & C. Bldg., Denver, Colo. '99
*Grant, Ulysses S., Prof. Geology, Northwestern University, Evanston, Ill. '01
*Grasselli, C. A.....Grasselli Chemical Co., The Arcade, Cleveland, Ohio. '92
*Grasty, J. Sharshall.....University, Va. '06
*Graton, Louis C., Min. Geol.....Geological Museum, Cambridge, Mass. '06
*Grave, Ernest, Min. Engr.....2a Allende 20, San Luis Potosi, Mexico. '98
*Graves, Chester H., Mine Supt.....Cedartown, Ga. '08
*Graves, McDowell, Min. Engr.....Radersburg, Mont. '02
*Gray, Edwin F.....Kotsina, Alaska. '04

*Gray, James H., Min. Engr., U. S. Steel Corpn., 71 Broadway, New York, N. Y. '07
†Graybill, John H., Electrical Inspector, Jones & Laughlin Steel Co., Pittsburg, Pa. '12
*Green, Andrew H., Jr., Mgr.....The Solvay Process Co., Detroit, Mich. '03
*Green, Charles B., Chem.....83 N. 4th St., Easton, Pa. '87
*Green, George G., Min. Engr.....Battelle, Ala. '09
*Greenall, John, Engr.....1503 Hamilton St., Allentown, Pa. '09
*Greenard, William F., Inspector of Mines, Menzies, North Coolgardie, Western Australia. '03
*Greene, Frederick T., Min. Engr... .....Silver Bow Club, Butte, Mont. '99
*Greene, Lewis H., Min. Engr.....560 Powell St., San Francisco, Cal. '05
*Greenidge, Samuel M., Min. Engr.....P. O. Box 364, Douglas, Ariz. '03
*Greenough, W. Earl, Mining.....Wallace, Idaho. '12
†Greensfelder, Nelson S., Min. Engr., United Copper Mining Co., Chewelah, Wash. '13
*Greenway, Thomas J., Min., Met. Engr., Genl. Mgr., Potters Sulphide Ore Treatment, Ltd., 369 Collins St., Melbourne, Vic., Australia. '95
**Greer, Herbert C., Min. Engr....P. O. Box 449, Morgantown, W. Va. '03
*Gregson, William H.....Instructed to hold all mail. '02
*Greit, Adolph J., Min. Engr.....27 William St., New York, N. Y. '08
*Gressang, Charles C., Supt., Kelly's Creek Colliery Co., Ward, Kanawha Co., W. Va. '09
*Grey, George R., Civ. and Min. Engr., 54 Ameshoff St., Johannesburg, Transvaal, So. Africa. '89
*Grier, Thomas J., Supt.....Homestake Mining Co., Lead, S. D. '92
*Griffin, Fitz Roy N., Min. Engr., Charterlands Goldfields, Ltd., Box 408, Bulawayo, Rhodesia, So. Africa. '06
*Griffin, Frank W.....506 Alaska-Commercial Bldg., San Francisco, Cal. '02
**Griffin, H. M., Mining, Care Noel Griffin, P. O. Box 592, Bulawayo, Rhodesia, So. Africa. '04
*Griffin, Martin L., Mgr., Chem. and Electrochem. Depts., Oxford Paper Co., Rumford, Me. '89
*Griffin, Maurice Edward, Secy., Western Engineering & Construction Co., 506 Alaska-Commercial Bldg., San Francisco, Cal. '02
*Griffin, P. H., Mfr.....N. Y. Car Wheel Works, Buffalo, N. Y. '91
*Griffith, Charles G., Min. Engr.....15 William St., New York, N. Y. '96
*Griffith, William, Cons. Min. Engr. and Geol., Coal Exchange Bldg., Scranton, Pa. '11
*Griffith, William V., Chem.....Bowie, Ariz. '08
*Griffiths, André P., Min. and Met. Engr., 781 Salisbury House, London, E. C., England. '96
*Griffiths, Harry D., Genl. Mgr., The Tronoh Mines, Ltd., Tronoh, Perak, Federated Malay States. '98
††Griffiths, Howard B., Civ. Engr.....2105 Boulevard, Wilmington, Del. '77
*Griffiths, John N., Cons. Engr., Griffiths House, London Wall, London, England. '00
†Griggs, Thomas W.....Secy., Security Investment Co., Davenport, Iowa. '99
*Grill, Charles H., Mine Supt.....Keddie, Plumas Co., Cal. '09
*Gripari, George N. de, Min. Engr...6 rue Cleopatre, Alexandria, Egypt. '10
*Griswold, Clyde T., Prof. of Min. and Met., Carnegie Technical Schools, Pittsburg, Pa. '07

*Griswold, Leon S., Cons. Min. Geol.....Plymouth, Mass. '00
**Gritzner, F. A., Chem. and Assayer.....1221 E. 63d St., Chicago, Ill. '87
*Grondijs, Heinrich F., Min. Engr. and Supt., Cia. Minera de Oruro,
Oruro, Bolivia, So. America. '08
*Groom, Thomas C., Min. Engr., Great Cobar, Ltd.,
Cobar, New South Wales, Australia. '07
*Gross, John, Met., Min. Engr., Draper & Gross,
709 Equitable Bldg., Denver, Colo. '96
*Grothe, A., Min. Engr., Grothe & Carter,
Apartado 2554, Mexico City, Mexico. '86
*Grove, Independence, Min. Engr., Amparo Mining Co.,
Etzatlan, Jal., Mexico. '05
*Grover, Maurice B., Min. Mgr.....Haileybury, Ont., Canada. '11
*Grunsky, Carl E., Jr., Min. Engr.,
Supt., Standard Consolidated Mining Co., Bodie, Cal. '09
*Guernsey, Forbes W., Min. Engr.,
Dept. of Nat. Resources, C. P. Ry. Co., Bankhead, Alta., Canada. '04
*Guess, George A., Prof. of Met., University of Toronto,
Toronto, Ont., Canada. '05
**Guess, Harry A.....Flat River, Mo. '00
*Guiterman, Franklin, Am. Smelt. & Refin. Co.,
165 Broadway, New York, N. Y. '05
*Gummere, William, Chem..... .....Roebling, N. J. '08
*Gunn, George E., Min. Engr., Prest. and Mgr., Gunn-Thompson Co.,
205–6 Newhouse Block, Salt Lake City, Utah. '04
*Gunther, C. Godfrey, Min. Engr., Care Santa Rita Hotel, Tucson, Ariz. '06
*Gwinn, James W., Min. Engr.....P. O. Box 421, Kellogg, Idaho. '12

*Haanel, Benjamin F. C., Min. Engr., 184 First Ave.,
Ottawa, Ont., Canada. '10
*Haas, Frank, Asst. Genl. Mgr.....Fairmont Coal Co., Fairmont, W. Va. '97
*Haas, Herbert, Cons. Met. Engr.,
524 Merchants Exchange Bldg., San Francisco, Cal. '02
*Haas, J. Cleveland, Min. Engr.....1009 Paulson Bldg., Spokane, Wash. '98
†Haasis, Albert L., Salesman, Jos. Dixon Crucible Co., Jersey City, N. J. '92
*Haasis, Dunbar F.....78 Seminary Ave., Rahway, N. J. '86
*Hackett, William H., Min. Engr.....Corpus Christi, Tex. '02
*Hadden, Robert W., Cons. Min. Engr., 1807 Harvard Blvd.,
Los Angeles, Cal. '07
Hadfield, Sir Robert A......22 Carlton House Terrace, London, S. W., England.
*Haehl, Harry L., Min., Civ. Engr., Duryea, Haehl & Gilman,
1314 Humboldt Bank Bldg., San Francisco, Cal. '03
*Hagar, Edward McK., Mgr., Universal Portland Cement Co.,
72 W. Adams St., Chicago, Ill. '02
*Hagemann, Wilhelm, Mgr., Cia. Minera Exploradora y Explotadora
de Guanacevi, S. A., Guanacevi, Dur., Mexico. '00
*Hager, Lee, Geol.....Hotel Brazos, Houston, Texas. '04
*Haggen, Edward A., Editor, *B. C. Mining and Engineering Record*,
1105 Dominion Trust Bldg., Vancouver, B. C.. Canada. '00
*Haggott, Ernest A., Min. Engr.....2525 W. 18th St., Los Angeles, Cal. '02
*Haggott, Warren A. .....1271 Marion St., Denver, Colo. '01
*Hague, Arnold, Geol., U. S. Geological Survey.....Washington, D. C. '74

**HAGUE, WILLIAM, Min. Engr.....22 William St., New York, N. Y. '06
**HAHN, O. H., Min. and Met. Engr.....Schillerstrasse 6, Jena, Germany. '71
*HALDEMAN, GEORGE T., Lehigh Valley Coal Co.,
214 Coal Exchange, Wilkes-Barre, Pa. '10
*HALDEMAN, HORACE L., Treas., Pulaski Iron Co.,
Real Estate Trust Bldg., Chestnut and Broad Sts., Philadelphia, Pa. '86
*HALE, HERBERT C., Contract. Engr....1038 Schofield Bldg., Cleveland, O. '07
*HALEY, D. F., Min. Engr.....P. O. Box 28, Basin, Mont. '08
*HALL, BENJAMIN M., Cons. Engr.....303 Peters Bldg., Atlanta, Ga. '95
*HALL, CHARLES M., Vice-Prest., Pittsburg Reduction Co.,
Niagara Falls, N. Y. '90
*HALL, EDGAR, Min. Engr. and Met., Managing Director, Silver Spur
Mining Co., Silver Spur, Queensland, Australia. '96
*HALL, EDWARD J., Vice-Prest., American Telegraph and Telephone Co.,
15 Dey St., New York, N. Y. '76
*HALL, EVERETT J., Tutor in Anal. Chem. and Assaying,
Columbia University, New York, N. Y. '02
*HALL, GEORGE, Min. Engr.....12 Sheepcote Road, Harrow, England. '01
*HALL, JOHN H., Cons. Engr., Room 503, 165 Broadway, New York, N. Y '12
*HALL, NEWMAN G.....Denver Club, Denver, Colo. '02
*HALL, SAMSON W., Genl. Mgr., Madison Lead & Land Co.,
Fredericktown, Mo. '98
*HALL, WILLIAM J., Asst. Genl. Mgr., Federal M. & S. Co.,
P. O. Box M., Wallace, Idaho. '12
*HALLETT, S. I., Mine Mgr.....847 Pearl St., Denver, Colo. '04
**HALLEY, ALBERT SMITH, Min. Engr.....Rapid City, S. D. '05
*HAMBLETON, JAMES W.....Apartado 76, Parral, Chihuahua, Mexico. '02
*HAMFELDT, GEORGE K.....S. Hammgatan 17, Gothenbourg, Sweden. '05
*HAMILTON, ALEXANDER, Min. Engr.....Dayton, Nev. '06
**HAMILTON, ARTHUR L., Min. Engr.....Fairbanks, Alaska. '03
*HAMILTON, CHARLES A., Cia. De Diversidades, S. A.,
Taviche, Oax., Mexico. '99
*HAMILTON, EDWARD H., Met.....Virginia Smelting Co., W. Norfolk, Va. '11
*HAMILTON, FRANK C., Compania Minera de Peñoles, Mapimi, Dur., Mexico. '93
*HAMILTON, FRANK W., Engr., Sales Dept., Lidgerwood Mfg. Co.,
96 Liberty St.. New York, N. Y. '13
**HAMILTON, JOHN W. H., Min. Engr., Hamilton & Hansell,
50 Church St., New York, N. Y. '12
*HAMILTON, RICHARD, Genl. Mgr., Great Boulder Proprietary Gold
Mines, Ltd., Boulder, Western Australia. '98
*HAMILTON, S. HARBERT, Min. Geol.....2050 N. 63d St., Philadelphia, Pa '05
*HAMILTON, THOMAS M., Min. Engr.,.....Lewistown, Mont. '02
*HAMILTON, WALTER R., Min. Engr., 502 Insurance Bldg.,
San Francisco, Cal. '04
*HAMILTON, WILLIAM J., Met., American Smelters Securities Co.,
Velardena, Dur., Mexico. '05
*HAMLYN, JOHN J., Supt.,.....Natomas Cons. of California, Oroville, Cal. '04
*HAMMAN, JOHN S., Min. Engr., Met., P. O. Box 1236,
Salt Lake City, Utah. '07
*HAMMER, ALFRED E., Chem., Genl. Mgr., Malleable Iron Fittings Co.,
Branford, Conn. '92
*HAMMER, JOHN G., Mgr., Butte Sewer Pipe & Tile Co.....Butte, Mont. '87

*Hammer, William L., Civ. and Min. Engr., Hannaford & Hammer, 603 Mesquite St., Corpus Christi, Tex. '05
*Hammon, Wendell P.....Alaska-Commercial Bldg., San Francisco, Cal. '01
†Hammond, Harold O., Copper Queen Reduction Works, Douglas, Ariz. '09
*Hammond, Isaac B., Min. Engr., Prest., Hammond Mfg. Co., Inc., 54 First St., Portland, Ore. '87
**Hammond, John Hays, Cons. Engr.....71 Broadway, New York, N. Y. '81
*Hampton, William Huntley.....Katalla, Alaska. '90
*Hance, James H., Min. Engr.....2312 17th St., N. W., Washington, D. C. '09
*Hanchett, Lafayette..... 983 Third St., Salt Lake City, Utah. '00
*Hanckel, Christian, Min. Engr., Silverton Mines, Ltd., Silverton, B. C., Can. '05
*Hanckel, Robert S., Civ. Engr. and Mine Surveyor, Purdy Engrg. Co., Apartado 750, San José, Costa Rica, C. A. '06
*Hancock, H. Lipson, Min. Engr., Mgr. Wallaroo & Moonta Mining & Smelting Co., Ltd., Wallaroo, So. Australia. '99
**Hancock, Strangman, Min. Engr., Kennel Holt, Cranbrook, Kent, Eng. '89
*Hand, Carlton H., Min. Engr.....4704 Wilton Pl., Los Angeles, Cal. '03
*Handy, Henry H. S., Vice-Prest., Semet-Solvay Co.....Syracuse, N. Y. '06
*Hanks, Abbot A., Chem., Assayer, 630 Sacramento St., San Francisco, Cal. '97
*Hanley, Herbert R., Min. Engr., Care Bully Hill Copper Mining & Smelting Co., Winthrop, Shasta Co., Cal. '01
*Hanley, J. A., Jr., Genl. Mgr., Salango Export Co., Salango, Machalilla, Ecuador, S. A. '01
*Hansell, Nils V., Min. Engr., Hamilton & Hansell, 50 Church St., New York, N. Y. '06
*Hansen, Fred., Min. Engr.....Box 975, Garfield, Utah. '10
*Hansen, George T., Min. Engr.....Allis-Chalmers Co., Dooly Bldg., Salt Lake City, Utah. '08
*Harada, Shinji, Min. Engr., Mitsubishi Kaisha, Marunouchi, Tokyo, Japan. '11
**Harden, Edward B., Civ. and Min. Engr., Isthmian Canal Commission, Washington, D. C. '73
**Harden, John H., Min. Engr.....Phœnixville, Pa. '71
*Hardenbergh, William P.....47 W. 34th St., New York, N. Y. '94
*Hardenburgh, Louis M., Mine Supt.....Odanah Iron Co., Hurley, Wis. '98
*Harder, Edmund C., Min. Geol., U. S. Geol. Survey, Washington, D. C. '10
*Hardinge, Hal. W., Min. Engr.....50 Church St., New York, N. Y. '02
*Hardison, Allen C., Civ. and Min. Engr.....Santa Paula, Cal. '99
*Hardman, John E., Cons Min. Engr., 112 St. James St., Montreal, Canada. '82
*Hardy, J. Gordon, Min. Engr.....P. O. Box 134, El Paso, Tex. '94
*Hare, A. W., Chem. and Assayer.....P. O. Box 381, Aspen, Colo. '89
*Hargraves, Ernest P., Met., 31 Queen St., Melbourne, Vic., Australia. '06
*Harlow, William P., Mineral., Geol., 541 Highland Ave., Boulder, Colo. '05
*Harms, Ernst, Supt., Cia. Metalurgica de Torreon, Torreon, Coah., Mex. '97
*Harrington, Harry G.....39 Pacific St., Newark, N. J. '01
†Harrington, Melvin H., Mfr. of Machinery, Edwin Harrington, Son & Co., 17th and Callowhill Sts., Philadelphia, Pa. '05
*Harris, Arthur L., Min. Engr.....Beristain, Pue., Mexico. '11
*Harris, Henry, Met., Genl. Mgr., Tasmanian Smelting Co., Zeehan, Tasmania. '05

*Harris, Willard F., Min. Engr.....Socorro Mines, Mogollon, N. M. '02
*Harris, William, Mine Supt.....Blackbutte, Ore. '08
*Harrison, Alfred William, Min. Engr...P. O. Box 129, Silverton, Colo. '01
*Harrison, Guy E., Min. Engr., Supt. of Mines,
Corrigan, McKinney & Co., Hibbing, Minn. '05
*Harrison, Thomas S., Min. Engr.....Wiley, Wyo. '10
*Harrison, William S., Min. Engr., The San Francisco del Oro
Mines, Ltd., Parral, Chihuahua, Mexico. '06
*Harrop, Harry S., Civ. and Min. Engr., 431 South Ave., Wilkinsburg, Pa. '08
†Hart, Charles R., Ore Purchaser.....Hermosillo, Sonora, Mexico. '05
*Hart, Edward, Prof. of Chemistry.....Lafayette College, Easton, Pa. '81
*Hart, Philip E., Mech., Elec. Engr.....91 Mackay St., Montreal, Canada. '06
*Hart, Verne A., Min. Engr., Cananea Cons. Copper Co., Cananea, Son.,
Mexico. '11
**Hartman, T. F.....Perry, Okla. '02
*Hartranft, S. S., Met.....Norristown, Pa. '77
**Hartrick, John Standish, 3 Murray St., Elsternwick,
Melbourne, Vic., Australia. '91
**Hartshorne, Joseph, Cons. Met. and Mech. Engr.....Pottstown, Pa. '73
*Harvey, Frederick H., Min. Engr.....Galt, Sacramento Co., Cal. '95
*Harvey, William S.....119 So. 4th St., Philadelphia, Pa. '02
*Hasegawa, Kanji, Min. Engr.,
Mitsui Kushikino Gold Mine, Kagoshima, Japan. '11
*Hasegawa, Kiohey, Min. Engr..... Furukawa Mining Co., Tokyo, Japan. '07
*Hasegawa, Tetsutaro, Min. Engr.....Furukawa Min. Co., Nikko, Japan. '08
*Haseltine, Richard S., Min. Engr.....Coalinga, Cal. '05
*Haskell, Harry G., Vice-Prest., Repauno Manuf. Co....Wilmington, Del. '94
*Haskell, J. Amory, Prest., Laflin & Rand Powder Co.,
Room 1609, 140 Cedar St., New York, N. Y. '88
**Hastings, John B., Min. Engr.....1018 Adams St., Denver, Colo. '86
*Hauber, Mathias, Jr., Chem.....Rue du Beucker 15, Antwerp, Belgium. '03
*Haultain, Herbert E. T., Min. Engr., Dept. of Min.,
Univ. of Toronto, Toronto, Ont., Canada. '98
*Havard, Francis T., Asst. Prof. Min. and Met.,
Univ. of Wisconsin, Engr. Dept., Madison, Wis. '03
**Hawdon, William,.....Newport Iron Works, Middlesbrough, England. '99
**Hawker, Edward W., Adelaide Club.....Adelaide, South Australia. '92
*Hawkins, Edwin N., Met., Min. Engr.....406 Boston Bldg., Denver, Colo. '90
*Hawkins, J. Dawson, Genl. Supt., U. S. Reduction and Refining Co.,
Colorado Springs, Colo. '93
*Hawkins, John T.....Box 563, Colorado Springs, Colo. '04
*Hawxhurst, Robert, Jr., Min. Engr., Care International Banking
Corpn., 36 Bishopsgate St., London, E. C., England. '05
*Hay, Alexander M.....Haileybury, Ontario, Canada. '01
**Hay, Henry, Min. Engr., Engr. Dept. Cons. Gold Fields of
So. Af., Ltd., 8 Old Jewry, London, England. '01
*Hayes, C. Willard, Geol., First V-P. and Genl. Mgr., Exploitation Dept.,
Cia. Mexicana de Petroleo, "El Aguila," S. A., Tampico, Tamps., Mex. '92
*Hayes, William H.....Moonta Mines, Moonta, So. Australia. '10
*Hayward, Carl R., Instructor of Min., Met....233 Goffe St., Quincy, Mass. '07
*Hazard, Frederick R., Prest., Solvay Process Co.....Syracuse, N. Y. '99

*Hazelet, George C., Mgr.....Cordova Power Co., Cordova, Alaska. '03
*Heal, John H., Min. Engr.....Singora, Siam. '01
*Hearne D. Garth, Civil Engr.....Wheeling, W. Va. '95
*Hearne, Julian G., Hearne Motor Co.,
15th and McColloch Sts., Wheeling, W. Va. '00
*Hearne, William W., Iron Mfr.....R. E. Trust Bldg., Philadelphia, Pa. '10
*Heath, George L., Chem. and Met., Calumet & Hecla Co., Hubbell, Mich. '91
*Heathcote, Charles F., Supt., Tasmania Gold Mining Co., Ltd.,
Beaconsfield, Tasmania. '97
*Hebb, Paul H., Mining.....Tacoma, Wash. '07
*Hebbard, Austin, Chem., Met.,
Langlaagte Estate, P. O. Box 98, Langlaagte, Transvaal, So. Africa. '04
*Hebbard, James, Mgr., Central Mine, Sulphide Corporation,
Broken Hill, New South Wales, Australia. '01
*Heberlein, Carl A., Min. Engr., Met.,
1710 Arlington Ave., Los Angeles, Cal. '07
*Heberlein, Kuno B., Genl. Mgr., Cia. Minera de Peñoles, S. A.,
Apartado 733, Mexico City, Mexico. '03
*Heck, Elmer C.....Clifton Water & Improvement Co., Clifton, Ariz. '06
*Heckscher, August, New Jersey Zinc Co., 576 Fifth Ave., New York, N. Y. '79
*Heckscher, Ledyard, Pig Iron Mfr...1421 Chestnut St., Philadelphia, Pa. '05
*Hedges, Joseph H., Min. Engr., 921 Washington Ave. N., Lansing, Mich. '97
*Hedley, Robert R., Min. Engr. Mgr., Canadian Mining
Operators, Ltd., 300 Pender St., W., Vancouver, B. C., Canada. '05
*Hegeler, Julius W.....203 N. Hazel St., Danville, Ill. '92
*Heidenreich, W. Lee, Min. Engr., Genl. Mgr.,
South Utah Mines & Smelters, Newhouse, Utah. '13
*Heikes, Victor C., Statistician...U. S. Geol. Survey, Salt Lake City, Utah. '96
*Heimer, Paul H., Min. Engr.....498 Norfolk St., Mattapan, Mass. '11
†Heinze, F. August, Mine Owner.....Butte, Mont. '89
*Heise, A. Roy, Min. Engr., Genl. Supt.,
Avila Refinery, Union Oil Co. of Calif., Avila, Cal. '07
*Heldt, Hans L., Supt., Sombrerete Min. Co., Sombrerete, Zac., Mexico. '07
*Heller, Martin J., Min. Engr.....43 Exchange Place, New York, N. Y. '96
*Hellmann, Frederick, Cons. Min. Engr.,
Chuquicamata, via Antofagasta, Chile, So. America. '97
*Helm, J. D.....Apartado 1277, Mexico City, Mexico. '02
*Henderson, Charles W., Statistician, U. S. Geological Survey,
311 Chamber of Commerce, Denver, Colo. '11
*Henderson, Edwin T., Met., Broken Hill Proprietary Co.,
Broken Hill, New South Wales, Australia. '05
*Henderson, Enoch, Min. Engr.....Houghton, Mich. '07
*Henderson, Harry P., Min. Engr., Mines Management Co.,
60 Broadway, New York, N. Y. '04
*Henderson, J. A. Leo, Min. and Cons. Engr.,
Devonshire Club, St. James St., London, S. W., England. '98
**Henderson, J. McClelland, Cons. Engr.....Springfield, Ore. '96
*Hendricks, George F., Min. Engr., Nipissing Mining Co.,
Cobalt, Ont., Canada. '12
*Hendrickson, William H., Min. Engr.....Frisco, Beaver Co., Utah. '12
*Henrich, Carl, Cons. Min. Engr.....Metasville, Wilkes Co., Ga. '82
*Henry, John L., Mine Mgr.....693 Sixth Ave., San Francisco, Cal. '05

**Hepburn, Arthur E., Min. Engr., 1146 Broughton St., Vancouver, B. C., Canada. '08
*Herman, Hyman, Mine Mgr., "Rilsa," Glen Eira Rd., St. Kilda, Victoria, Australia. '05
*Hernandez, Marcos F., Cons. Engr., Matamoros 212, Monterey, N. L., Mexico. '02
**Herndon, Edward L., Secy., Eastern Steel Co.....Pottsville, Pa. '82
*Heron, Charles L., Min. Engr.....El Tigre Mine, Yzabal, Son., Mexico. '13
*Heroult, Paul L. T., Engr., The Ansonia, 73d St. and Broadway, New York, N. Y. '07
*Herr, Herbert T., Min. Engr., Genl. Mgr., Westinghouse Machine Co., East Pittsburg, Pa. '07
*Herr, Irving, Min. Engr.....Apartado 49, Guanajuato, Mexico. '04
*Herreshoff, J. B. F., Chem.....620 West End Ave., New York, N. Y. '86
*Herrmann, Charles E., Iron Ore Miner and Shipper, 17 Battery Pl., New York, N. Y. '12
*Hersam, Ernest A., Asso. Prof. Met., Univ. of California, Berkeley, Cal. '99
*Herz, Nathaniel, Asst. Chem., Homestake Mining Co., P. O. Box 847, Lead, S. D. '09
*Herzig, Charles S., Min. Engr., 412 Salisbury House, London, E. C., Eng. '95
*Hess, Frank L., Geol.....U. S. Geological Survey, Washington, D. C. '07
*Hess, Henry, Mech. Engr.....928 Witherspoon Bldg., Philadelphia, Pa. '13
*Hesse, Herman V., Min. Engr., Genl. Supt., The Consolidation Coal Co., Frostburg, Md. '04
*Hewett, Donnel F., Min. Engr., U. S. Geol. Survey, Washington, D. C. '08
*Hewitt, Earl E., Min. Engr.....De Lancey, Jefferson Co., Pa. '06
*Hewitt, Edward R., Chem.....17 Burling Slip, New York, N. Y. '94
**Hewitt, Erskine, Secy., Pequest Co., 50 Church St., New York, N. Y. '05
*Hewitt, Frank R., Miner of Talc and Kaolin, 311 Montford Ave., Asheville, N. C. '09
*Hewitt, George H., Min. Engr.....707 State St., Springfield, Mass. '80
*Heywood, William A.....Address wanted. '96
*Hibbard, Henry D.....Plainfield, N. J. '79
*Hibbert, Ernest, Min. Engr., Care J. A. Holmes, Sudbury, Ont., Canada. '06
*Hibbs, Joseph G., Chem.....613 Penna. Bldg., Philadelphia, Pa. '08
*Hicks, Charles M.....Wytheville, Va. '04
*Higgins, Edwin, Cons. Min. Engr., U. S. Bureau of Mines, Ironwood, Mich. '09
*Higgins, John Michael.....39 Queen St., Melbourne, Victoria, Australia. '91
*Higgins, Thomas F., Smelter Supt., Central Chile Copper Co., Panulcillo, Coquimbo, Chile, S. A. '09
*Hildreth, Thomas F., Mgr. of Mines, Davidson Ore Min. Co., Buffalo, N.Y. '05
*Hill, Charles R., Min. Engr.....161 Bay State Road, Boston, Mass. '13
*Hill, Frank A.....512 S. Centre St., Pottsville, Pa. '83
*Hill, Frank Albert, Min. Engr...411 Mutual Life Bldg., Seattle, Wash. '05
*Hill, Frank C., Min. Engr.....Clear Creek, Utah. '04
*Hill, Roger R., Coal and Iron Lands, 504 Bearinger Bldg., Saginaw, Mich. '09
*Hill, Rowland F., Min. Engr.....Pulaski Mining Co., Pulaski, Va. '97
*Hill, Walter H., Cons. Engr.....Grangeville, Idaho. '00
*Hiller, Edward.....P. O. Box 884, Birmingham, Ala. '95
*Hilles, Joseph T., Coal Mining, Hatfield & Hilles, 1319 Real Estate Trust Bldg., Philadelphia, Pa. '92
*Hills, Victor G., Cons. Min. Engr.....318 McPhee Bldg., Denver, Colo. '96

**Hinchman, Charles S., Prest., Washington, Arlington & Falls Church Ry., Room 902, 50 S. 4th St., Philadelphia, Pa. '79
*Hindshaw, Henry H.....254 Washington Ave., Alpena, Mich. '05
*Hinman, B. C., Chem. and Met. Engr., Coventry House, South Pl., London, E. C., England. '96
*Hinricksen, Henry T., Mgr., Lota Copper Wks., Fundicion de Cobre, Lota, Chile, S. A. '08
*Hioke, Masaki, Prof. of Min. Engrg., Akita Mining School, Akita, Japan. '12
*Hoaas, Ole G., Min. Engr.....P. O. Box 682, San Francisco, Cal. '09
*Hoadley, C. Barnes, Cyaniding, Cia. Minera El Faror, Hostotipaquillo, Jal., Mexico. '08
**Hoar, Frederic W., Min. Engr. and Met.....P. O. Box 959, Globe, Ariz. '02
*Hoatson, John, Min. Engr.....St. Augustine, Fla. '91
*Hobart, Samuel O., Furnaceman, Warwick I. & S. Co., Pottstown, Pa. '08
*Hobson, Robert, Genl. Mgr., Hamilton S. & I. Co., Hamilton, Ont., Can. '99
†Hochchild, Berthold, Prest. Am. Metal Co., 52 Broadway, New York, N. Y. '12
†Hochschild, Mauricio, Power Atty., Cia. de Minerales y Metales, S. A., Apartado 733, Mexico City, Mexico. '01
**Hodge, Arthur Cairn, Min. Engr., Care James Floyd, St. Austell, Cornwall, England. '89
*Hodge, James M., Engr. and Geol.....Big Stone Gap, Va. '88
*Hodge, Walter R., Min. Engr., Geol., 134 College Ave., Houghton, Mich. '05
**Hodges, A. B. W., Min. Engr., Met..... ....P. O. Box 140, Tooele, Utah. '89
*Hodgson, Joseph P., Supt. of Mines.....P. O. Box 208, Bisbee, Ariz. '13
Hoefer, Prof. Hans.....Leoben, Austria.
*Hofecker, Charles A., Min. Engr., Ok-Dagh-Maden, Villayet d'Angora, Turkey in Asia. '12
*Hoffmann, August O., Min., Met. Engr., Handtverkargatan 15, Stockholm, Sweden. '11
*Hoffmann, John I., Cons. Min. Engr., 216 Moorgate Station Chambers, London, E. C., England. '06
*Hoffmann, Karl F. Min. Engr.....Apartado 57, Mexico City, Mexico. '12
*Hoffmann, Rudolf, Prof. der Hüttenkunde an der Kgl. Bergakademie, Bergstrasse 948 I, Clausthal, Harz, Germany. '10
*Hoffstot, F. N.....24 Broad St., New York, N. Y. '82
*Hofman, Dr. H. O., Prof. Met., Mass. Inst. of Tech.....Boston, Mass. '82
*Hofstrand, Oscar B., Met. Engr.....Wallace, Idaho. '12
*Hogarty, Barry, Chem.....Garfield Smelting Co., Garfield, Utah.. '02
*Hoggatt, Wilford B., Mine Supt...110 Beechwood Road, Summit, N. J. '04
*Hohagen, George.....Potosi, Bolivia, So. America. '08
*Holberton, Walter T., Min. Engr., Mgr., Société Francaise de Mines de Cuivre, Collahuasi, La Grande, Antofagasta, Chile, So. America. '00
*Holbrook, Elmer A., Asst. Prof. of Min. and Met., Nova Scotia Technical College, Halifax, N. S., Canada. '08
†Holbrook, Levi.....P. O. Box 536, New York, N. Y. '78
*Holden, Edwin C., Min. Engr .....Univ. of Wis., Madison, Wis. '97
*Holden, James O. E., Supt., Princeton Coal & Land Co., Ltd., Princeton, B. C., Canada. '12
*Holden, L. E., Prest., *Cleveland Plain Dealer*.....Cleveland, Ohio. '86
*Holden, Roy J., Teacher.....Blacksburg, Va. '08
*Holderer, George B., Min. Engr.....165 Broadway, New York, N. Y. '12

*Holding, Charles, Supt., St. Louis Smeltg. & Refg. Co., Collinsville, Ill. '10
*Holgate, Thomas E., Mgr. Blast Furnaces (Darwen Works), Darwen & Mostyn Iron Co., Ltd., Darwen, England. '92
*Holland, L. F. S., Min. Engr., Supt. of Mines, Smuggler Union Mining Co., Smuggler, Colo. '01
*Hollings, J. Spencer.....Brymbo, Nr. Wrexham, N. Wales, Gt. Britain. '02
*Hollis, Charles B., Supt., Eastern Talc Co.....Box 489, Randolph, Vt. '10
*Hollis, Geoffrey C., Min. Engr.....Apartado 57, Pachuca, Mexico. '06
*Hollis, Henry L., Min. Engr., Met.....First Natl. Bank Bldg, Chicago, Ill. '85
*Hollis, R. W., Min. Engr.....Address wanted. '94
*Holloway, Wilfrid S.....''The Valley,'' Bromley, Kent, England. '03
*Holman, F. C.....558 Lincoln Ave., Palo Alto, Cal. '81
*Holmes, Frederick C.....P. O. Box 2, San Juan, Porto Rico. '09
*Holmes, Joseph A., Geol., Dir., Bureau of Mines.....Washington, D. C. '95
†Holmes, R. G., Salesman, Denver Rock Drill Co., Care United Iron Works, Spokane, Wash. '12
*Holt, Herbert L., Min. Engr., Care Tom Boy Gold Mining Co., Ltd., Smuggler, Colo. '05
*Holt, Marmaduke B., Min., Elect. Engr., 820 Gaylord St., Denver, Colo. '89
*Holter, Edwin O., Lawyer.....60 Broadway, New York, N. Y. '10
*Home, Douglas R.....Survey Dept., Giza, Cairo, Egypt. '02
*Honeyman, Ellis W., Smelter Supt., Detroit Copper Co. of Ariz., Morenci, Ariz. '04
**Honnold, William L., Cons. Min. Engr., Consolidated Mines Selection Co., Ltd., Corner House, Johannesburg, So. Africa. '93
*Hood, Ozni P., Chief Mech. Engr., Bureau of Mines.....Pittsburg, Pa. '01
**Hooker, Brian, Min. Engr., Carrick Hill, Claremont Crescent, Canterbury, Melbourne, Victoria, Australia. '96
*Hooker, Walter, Civ. and Min. Engr., 3 Lombard St., Bank, London, E. C., England. '10
*Hooper, Edward, Min. Engr., Care Hooper, Speak & Fielding, 3 London Wall Bldgs., London, E. C., England. '88
*Hooper, Frank C., Met. Engr., Mgr., North River Garnet Co., North River, Warren Co., N. Y. '03
*Hooper, George H.....134 West End Ave., Somerville, N. J. '95
*Hoover, Herbert C., Bewick, Moreing & Co., 1 London Wall Bldgs., London, E. C., England. '96
†Hoover, Theodore J., Cons. Min. Engr., 1 London Wall Bldgs., London, E. C., England. '00
*Hoover, William M., Min. Eng.....173 N. Laurel St., Hazelton, Pa. '12
*Hopkins, Clarence V., Min. Engr., United Verde Copper Co., Jerome, Ariz. '09
*Hopkins, Gerald Voss, Met. Chem., Nicholaston House, Penmaen, R. S. O., Glamorgan, Wales, Great Britain. '02
*Hopper, Walter E., Instructor in Geol., Mich. College of Mines, Houghton, Mich. '11
*Hore, Reginald E., Instructor in Petrography, Dept. of Geol., Michigan College of Mines, Houghton, Mich. '08
*Horsburgh, James, Met., Chillagoe Co., Ltd., Chillagoe, Queensland, Aust. '05
*Horschitz, Richard J., Min. Engr.....Address wanted. '09
*Horst, Clarence W. H., Min. Engr., East Rand Proprietary Mines, East Rand, Transvaal, So. Africa. '00

*Horswill, Frederick J., Min. Engr.....1070 16th St., Oakland, Cal. '08
*Horwood, Cuthbert B., Min. Engr., Tunstall Rectory, Suffolk, England. '08
*Horwood, E. J., Mgr., Broken Hill Prop. Co., Broken Hill, N. S. W., Aust. '93
*Hoskin, Arthur J., Min. Engr., Western Editor, *Mines and Minerals*,
1822 First National Bank Bldg., Denver, Colo. '08
*Hoskins, William, Chem. and Assayer, Care Mariner & Hoskins,
200 Harris Trust Bldg., Chicago, Ill. '87
*Hotchkin, Merritt W., Min. Engr, Box 356, Haileybury, Ont., Canada. '11
*Houck, Charles B., Vice-Prest. and Genl. Mgr., W. B. & H. R. R.,
Hazleton, Pa. '11
*Houser, John N., Mine Mgr., American Zinc, Lead & Smelting Co.,
Carterville, Mo. '12
**Hovey, Edmund O., Geol., Am. Museum of Nat. Hist., New York, N. Y. '05
*Hovland, Henry B., Min. Engr.....403 Lonsdale Bldg., Duluth, Minn. '04
*Howald, Ferdinand, Min. Engr., 78 Park Drive, Bexley, Columbus, Ohio. '84
*Howard, John J., Blast Furn. Supt., 389 W. Blockwell St., Dover, N. J. '09
*Howard, William H., Supt., Am. Smelt. & Ref. Co.,
Salt Lake City, Utah. '95
*Howat, Andrew M., Min. Engr., 908 W. P. Story Bldg., Los Angeles, Cal. '10
*Howe, Albion S., Min. Engr.....Mills Bldg., San Francisco, Cal. '00
*Howe, Ernest, Geol.....77 Rhode Island Ave., Newport, R. I. '09
*Howe, Frank P., Iron Mfr.....La Follette, Tenn. '79
*Howe, Henry M., Prof. of Met....Broad Brook Rd., Bedford Hills, N. Y. '71
*Howell, Franklin D., Cons. Engr., 548 I. W. Hellman Bldg.,
Los Angeles, Cal. '11
*Howells, George A., Mining Machinery, 11 Broadway, New York, N.Y. '08
*Hower, Charles L., Mng. Dir., Crown Coal & Coke Co.,
625 Peyton Block, Spokane, Wash. '11
†Huang, Saosan Ken, Min. Engr.....P. O. Box 66, Bethlehem, Pa. '11
*Hubbard, Harry J., Foreman, Minas del Tajo.....Rosario, Sin., Mexico. '06
*Hubbard, Lucius L., Genl. Mgr., Winona Copper Co., Houghton, Mich. '00
*Huber, Charles F., Vice-Prest. and Genl. Mgr.,
Lehigh & Wilkes-Barre Coal Co., 160 S. River St., Wilkes-Barre, Pa. '11
*Hudson, Albert W., Met.....Instructed to hold all mail. '99
*Hudson, J. Banks, Genl. Mgr., Princess Furnace Co., Glen Wilton, Va. '07
*Huff, William McM., Assayer.....Kellogg, Idaho. '07
**Hughes, A. D.....29 Holland Park, London, W., England. '92
*Hughes, Herbert W., Min. Engr. ..24 Wolverhampton St., Dudley, Eng. '87
**Hughes, Hugh, Mine Engr., Modderfontein Deep Levels, Ltd.
P. O. Box 49, Brakpan, Transvaal, So. Africa. '98
*Hughes, Wilson W., Min. Engr., Cia. Real del Monte,
Pachuca, Hid., Mexico. '07
*Hugon, Edward C., Min. Engr., Mines de Pierrefitte,
Hautes Pyrénées, France. '09
*Hulick, Charles Edwin, Supt., Thomas Iron Co.....Hellertown, Pa. '02
†Hulick, William H., Vice-Prest., Warren Foundry & Machine Co.,
111 Broadway, New York, N. Y. '82
*Hulst, Nelson P., Min. Engr.....300 Knapp St., Milwaukee, Wis. '76
*Humbert, Frank U., Min. Engr.....Low Moor, Va. '10
*Humes, James, Supt., Silver-King Coalition Mines Co., Park City, Utah. '07
*Hummell, Archabald S., Chem.....High Bridge, N. J. '09

*Humphrey, Charles, Min. Engr., C. W. Hunt Co.,
West New Brighton, Staten Island, N. Y. '85
*Humphrey, George S., Controller and Purchasing Agent, C. W. Hunt Co.,
45 Broadway, New York, N. Y. '84
*Humphrey, John M.,.....458 S. Franklin St., Wilkes-Barre, Pa. '07
**Humphreys, Alexander C., Min. Engr., Prest. of Stevens Inst. Tech.,
Care Humphreys & Glasgow, 165 Broadway, New York, N. Y. '85
*Humphreys, Charles H., Met., Mount Morgan, Queensland, Australia. '07
*Hundeshagen, Ludwig, Min. Engr., Loeboe Sikaping, Sumatra, D. E. I. '05
*Hunnings, Samuel V., Chem., Engr. of Tests, American
Locomotive Co., Schenectady, N. Y. '12
*Hunt, Archibald J., Chem.....15 Rue de Beucker, Antwerp, Belgium '08
*Hunt, Bertram, Care E. Hunt & Co., 121 W. George St.,
Glasgow, Scotland '96
*Hunt, Fred. F., Min. Engr., Anal. Chem.....77 Pine St., New York, N. Y. '80
*Hunt, Robert W., Cons. Engr., 2200 Insurance Exchange Bldg., Chicago, Ill. '74
*Hunter, Charles, Mine Mgr., Piggs Peak Development Co.,
Piggs Peak, Swaziland, So. Africa. '11
*Hunter, Hansaburo, Met., E. W. Hunter & Co.,
1 St. Mary Axe, London, E. C., England. '04
*Huntley, Dwight B., Min. Engr.....31 Bella Vista Ave., Oakland, Cal. '92
*Huntoon, Louis D., Cons. Min. Engr... 165 Broadway, New York, N. Y. '97
*Hurd, Walter E., Mining.....Haileybury, Ont., Canada. '12
*Huston, Charles L., Steel Mfr.....Coatesville, Pa. '07
*Huston, Harry L., Min. Engr., 9 Upper Hamilton Terrace,
London, N. W., England. '03
*Hutcheson, William C., Supt. of Mines.....Wind Rock, Tenn. '11
*Hutchins, John P., Cons. Min. Engr., 20 Galernaya, St. Petersburg, Russia. '06
*Hutchins, R. Grosvenor, Jr., Care National Bank of Commerce,
31 Nassau St., New York, N. Y. '00
*Hutchinson, E. S., Min. Engr.....Newtown, Pa. '80
**Hutchinson, Edward C., Mining, 409 Montgomery St.,
San Francisco, Cal. '12
*Hutchinson, Joseph H., 702 Mutual Sav. Bk. Bldg., San Francisco, Cal. '05
*Hutchinson, Randolph B., Min. Engr. and Met.,
Toltu Club, El Paso, Tex. '91
*Hutchinson, W. Spencer, Min. Engr.....8 Congress St., Boston, Mass. '95
*Hybinette, Victor, Met. Engr.....Somerrogaden 15, Kristiania, Norway. '01
*Hyde, James M., Min. Engr.....334 Lincoln Ave., Palo Alto, Cal. '07
*Hyder, Charles A., Min. Engr., Care Hyder & Hyder, Nacozari,
Sonora, Mexico. '06
*Hyslop, James E.....Apartado 48, Parral, Chihuahua, Mexico. '04

*Ihlseng, Axel O., Cons. Min. Engr.. 541 W. 124th St., New York, N. Y. '82
*Ihlseng, Magnus C.....953 E. 18th St, Brooklyn, N. Y., '74
*Iioka, Masashige, Min. Engr., 25th Nakaroku banche,
Kojimachi, Tokyo, Japan. '08
*Imaizumi, Kaichiro, Engr.....Honjo 161, Toyosaki-Mura, Osaka, Japan. '03
*Imhoff, Alexander, Mine Mgr.....458½ Custer Ave., Los Angeles, Cal. '03
*Imhoff, Wallace G., Met. Engr.....6805 Penn Ave., Pittsburg, Pa. '10
*Ingalls, Walter R., Editor, *Engineering and Mining Journal*,
505 Pearl St., New York, N. Y. '91

*Ingalsbe, Frank R., Min. Engr.....Forestry Service, Missoula, Mont. '12
*Ingersol, John W., Chem..... .....P. O. Box 504, Tonopah, Nev. '05
†Ingham, William A., Prest., Rock Hill Iron and Coal Co.,
406 Lafayette Bldg., Philadelphia, Pa. '72
*Inglis, James F., Min. Engr.....535 Ninth Ave., Salt Lake City, Utah. '10
*Innes, Murray, Cons. Min. Engr.....218 Kohl Bldg., San Francisco, Cal. '95
*Inouyé, Koji, Chief of Commercial Dept., Furukawa & Co.,
Marunouchi, Tokyo, Japan. '11
**Inouyé, Tadashiro, Prof. of Mining, Kyoto Imperial Univ.,
83 Shimo-osaki-machi, Yebara-gori, Tokyo, Japan. '12
**Ionides, Stephen A., Min., Met. Engr., 929 Foster Bldg., Denver, Colo. '06
*Ipina, Roberto, Merchant & Miner, Apartado 30, San Luis Potosi, Mexico. '98
*Iredell, Frank W., Mgr., C. & G. Cooper Co.,
11 Broadway, New York, N. Y. '09
*Ireland, James D., Min., Mech. Engr.,
Genl. Mgr., M. A. Hanna & Co., 701 Sellwood Bldg., Duluth, Minn. '05
*Irving, John D., Sheffield Scientific School, Yale Univ., New Haven, Conn. '01
*Irwin, David D.....Care W. R. Cox, Metcalf, Ariz. '09
*Irwin, Frederic.....2357 W. 31st St., Los Angeles, Cal. '96
*Ives, Glen P., Min. Engr.....Cachinal, Taltal, Chile, So. Am. '09
*Ivey, Joseph H., Min. Engr., Stray Park House, Camborne,
Cornwall, England. '09
*Iweins, Paul, Civ. and Min. Engr.....48 Rue Cambon, Paris, France. '07

*Jabs, Asmus..... .....Alpenstrasse 7, Zurich, Switzerland. '88
*Jack, James, Met., Care Inst. of Min. and Met.,
Salisbury House, London, E. C., England. '05
*Jackling, Daniel C., Met. Engr., Genl Mgr., Utah Copper Co.,
Box 1556, Salt Lake City, Utah. '00
*Jackman, Herbert E., Min. Engr., 133 Dunn Ave., Toronto, Ont., Canada. '09
*Jackson, Byron N., Assayer and Chem.,
836 Kensington Rd., Los Angeles, Cal. '04
*Jackson, Frederick H., Mill Supt., Santa Rosa Min. Co., Apartado 12,
Concepcion del Oro, Zac., Mexico. '08
*Jackson, George R., Supt. of Mines.....Princeton, Mich. '08
*Jackson, J. Howard, Authorized Surveyor and Min. Engr., Blue Spur
Consolidated Gold Co., Ltd., Lawrence, Otago, New Zealand. '93
*Jackson, Walter H., Min. Engr.....Address wanted. '05
*Jacobus, David S., Advisory Engr., The Babcock & Wilcox Co.,
85 Liberty St., New York, N. Y. '88
*James, Alfred, Cons. Min. Engr., 2 Broad St. Place, London, E. C., Eng. '94
*James, Arthur Curtiss, Metal Merchant, Phelps, Dodge & Co.,
99 John St., New York, N. Y. '02
*James, Charles E., Prest., Durham Coal and Coke Co., Chattanooga, Tenn. '97
*James, Cyril H., Min. Engr., Bewick, Moreing & Co.,
62 London Wall, London, E. C., England. '06
*James, J. H. Cordner, Cons. Min. and Met. Engr., Finsbury House,
Bloomfield St., London, E. C., England. '99
*James, Ulysses S., Met. Engr.....35 Runyon St., Newark, N. J. '12
*James, Dr. Walter M., Physician.....1231 Locust St., Philadelphia, Pa. '84
*James, Webster T., Vice-Prest. and Genl. Mgr.,
Durham Coal & Coke Co., Chattanooga, Tenn. '01

*James, William Ewart, Min. Engr.....Carbon, W. Va. '11
*Jameson, Arthur H.....Branford, Conn. '02
*Jamison, Claude E., Min. Engr.....State Geol., Cheyenne, Wyo. '05
*Janeway, John H., Jr., Engr..... 55 Wall St., New York, N. Y. '86
*Janin, Charles, Min. Engr.....620 Kohl Bldg., San Francisco, Cal. '12
*Janin, Louis, Cons. and Min. Engr.....Solvang, Santa Barbara Co., Cal. '72
*Janney, T. Gordon, Cons. Engr.....Leesburg, Va. '02
*Jaques, William H....Hotel Puritan, Commonwealth Ave., Boston, Mass. '90
*Jarman, Arthur, Asst. Genl. Mgr., Waihi Grand Jc. Gold Co., Ltd., Waihi, Auckland, New Zealand. '02
*Jarvis, Royal P., Prof. of Mining.....1700 Cornell Ave., Knoxville, Tenn. '00
*Jayne, Amel R., Min. Engr.....319 New York Block, Seattle, Wash. '12
**Jeffrey, Robert H., Min. Engr.....Gabriel, Dur., Mexico. '96
*Jeffreys, Geoffrey, Mng. Dir., Elektra Oil Synd. of Mex., Ltd., Apartado 8, Tampico, Tamps., Mexico. '11
*Jeffries, Zay, Instructor in Met., Case School of Applied Science, Cleveland, Ohio. '13
*Jeffs, Lewis A., Min. Engr., U. S. Phosphate Co., 919 Kearns Bldg., Salt Lake City, Utah. '08
**Jenkins, Francis.....Bursar, Univ. of Idaho, Moscow, Idaho. '00
*Jenkins, Weston, Jr.....Rome Merchant Iron Mill, Rome, N. Y. '08
*Jenks, Arthur W., Min. Engr., Met., Chilecito, Prov. de Rioja, Argentine Republic, So. Am. '87
**Jenks, Norman L., Min. Engr.....P. O. Box 46, Butte, Mont. '09
*Jenks, Thomas H., Cons. Min. Engr.....518 McPhee Bldg., Denver, Colo. '02
*Jenks, William, Mining..... P. O. Box 173, Albuquerque, N. M. '87
*Jenney, Walter P.....1763 Q St., N. W., Washington, D. C. '74
*Jennings, E. P., Min. Engr.....607 Newhouse Bldg., Salt Lake City, Utah. '76
**Jennings, Hennen, Cons. Engr., 2221 Massachusetts Ave., Washington, D. C. '84
*Jennings, Robert E., Carpenter Steel Co., 100 Broadway, New York, N.Y. '91
**Jennings, Sidney J., Cons. Engr.....44 E. 80th St., New York, N. Y. '94
*Jennison, William F., Min. Engr., P. O. Box 527, Truro, N. S., Canada. '03
*Jeppson, George N., Asst. Supt., Norton Emery Wheel Co., Worcester, Mass. '01
*Jessup, Albert B., Min. Engr.....Jeddo, Pa. '06
*Jewett, Frank G., Min. Engr., Supt. Exploration, E. J. Longyear, Hibbing, Minn. '03
*Jewett, Freeland, Prest., Eastern Talc Co., 45 Milk St., Boston, Mass. '11
*Jobson, John, Supt., Broken Hill Proprietary Co., Port Pirie, So. Australia. '96
*John, David, Min. Engr., Chem. and Met...Haileybury, Ontario, Canada. '06
*Johnesse, Frank E., Min. Engr.....1820 No. 7th St., Boise, Idaho. '07
**Johns, J. Henry, Cons. Min. Engr., "Kenwyn," Guildford Rd., Working, Surrey, England. '94
*Johnson, Alexander T, Min. Engr., Genl. Mgr., Yellow Pine Min. Co., Good Springs, Nev. '91
*Johnson, Charles H., Min. Engr., Mgr., C. W. Johnson Limestone Co., New Castle, Pa. '93
*Johnson, Dion L., Met.....Address wanted. '07
*Johnson, Edward H., Met., East Rand Prop. Mines, Ltd., Box 134, East Rand, Transvaal, So. Africa. '11
*Johnson, Edward W.....Univ. Club, Salt Lake City, Utah. '93
*Johnson, Elias M., Genl. Mgr., Johnson Steel Wks., Spuyten Duyvil, N.Y. '02

*Johnson, George, Jr., Mining, 418 Merchants Trust Bldg., Los Angeles, Cal. '08
*Johnson, Howard S., Elect, Min. Engr., Charleston Electrical Supply Co., Charleston, W. Va. '00
*Johnson, Joseph E., Jr., Mgr., Lake Superior Iron & Chemical Co.'s Plant, Ashland, Wis. '95
*Johnson, Maurice M., Mine Mgr., 521 East Second South St., Salt Lake City, Utah. '05
*Johnson, Paul, Min. Engr.....Lund, Sweden. '06
*Johnson, Robert R., Min. Engr., 38 Heath Hurst Rd., Hampstead, London, N. W., England. '04
*Johnson, Walter L.....Port Clarence, Middlesbrough, England. '04
*Johnson, Woolsey McA., Met.....39 Vernon St., Hartford, Conn. '03
**Johnston, Albert W.....111 Broadway, New York, N. Y. '05
**Johnston, Archibald, Genl. Supt., Bethlehem Steel Co., South Bethlehem, Pa. '02
*Johnston, Fred., Chem.....22 Sherman Ave., Denver, Colo. '00
*Johnston, Fred. L.....325 East Anapamu St., Santa Barbara, Cal. '05
*Johnston, J. Howard, Civ. and Min. Engr., Care Morgan, Harjes & Co., 31 Boulevard Haussmann, Paris, France. '87
*Johnston, R. Barker, Mine Mgr., Care Tinoca, Ltd., 20 Rua de S. Paulo 1°, Lisbon, Portugal. '98
†Johnston, Roderick L., Tank House Foreman, U. S. Metals Refining Co.. Chrome, N. J. '12
*Jones, Archie H., Supt., Belmont Milling Co.....Tonopah, Nev. '12
*Jones, C. Colcock, Min., Met. Engr., 1001 Trust & Savings Bldg., Los Angeles, Cal. '00
*Jones, Charles H., Tech. Chem., 28 Bourne Rd., Crouch End, London, N., England. '04
*Jones, Clemens Ap-C., Cons. Engr., 908 W. Franklin St., Richmond, Va. '86
**Jones, Edward B., Min. Engr., Geol.....Box 502, Salt Lake City, Utah. '02
*Jones, Edward S., Coal Operator.....Commonwealth Bldg., Scranton, Pa. '04
*Jones, Evan R., Supt.....Fenix Coal Co., El Fenix, Coah., Mexico. '02
*Jones, Fayette A., Cons. Min. Engr., Armija Bldg., Albuquerque, N. M. '98
*Jones, H. Ewer, Min. Engr., The Lodge, Culmington Rd., Ealing, London, W., England. '04
*Jones, J. Elmer, Supt.....Mill Creek Coal Co., New Boston, Pa. '94
*Jones, John T., Blast Furn. Mgr.....Iron Mountain, Mich. '80
*Jones, Lewis M., Min. Engr.....U. S. Bureau of Mines, Pittsburg, Pa. '12
*Jones, Owen, Min. Engr.....Instructed to hold all mail. '04
*Jones, Thomas D.....Vice-Prest., Mill Creek Coal Co., Hazleton, Pa. '75
*Jones, Thomas J., Mine Mgr., Kyshtim Mining Wks., Perm Govt., via St. Petersburg, Russia. '92
*Jones, William, Cons. Min. Engr. and Met., Redhill House, Chislehurst, Kent, England. '05
*Jones, William L., Genl Mgr...Jones & Laughlin Steel Co., Pittsburg, Pa. '88
*Jones, William Strickler, Min. Engr.....Greensburg, Pa. '01
†Jones, Zechariah, Constr. Engr.....P. O. Box 371, Republic, Wash. '12
*Jongh, A. C. de, Min. Engr.....Hoofdbureau Mijnwezen, Batavia, D. E. I. '07
*Jopling, James E., Min. Engr., Cleveland Cliffs Iron Co., Ishpeming, Mich. '84
†Jopling, Reginald F., Min. Engr.....303 Penn Bldg., Cleveland, Ohio. '89

*Joralemon, Ira B., Min. Geol., Calumet & Arizona Mining Co., Warren, Ariz. '12
*Jordan, Fred A.....Sellwood, Ont., Canada. '05
*Jordan, Harold S., Min. Engr.....Campo Seco, Cal. '12
*Jorgensen, Frank F., Min. Engr., Consolidated Coal Co., Buxton, Iowa. '12
*Josephs, Irving S., Min. Engr.....255 W. 108th St., New York, N. Y. '09
*Joüet, Cavalier H., Anal. Chem., Tutor, Columbia Univ., New York, N.Y. '83
*Judd, Harry E., Min. Engr., Care C. P. Perin, 2 Rector St., New York, N.Y. '10
*Judge, Arthur Theo., Underground Mgr., Nourse Mines, Ltd., Box 32, Denver, Transvaal, South Africa. '01
*Judson, John N., Cons. Min., Met. Engr...42 Broadway, New York, N. Y. '84
*Jui, Pao vung, Min. Engr....Care U. S. Postal Agency, Shanghai, China. '12
*Julihn, Carl E.....281 Natoma St., San Francisco, Cal. '05

*Kada, Teichi, Min. Engr.....34 Honmura Yotsya, Tokyo, Japan. '88
*Kaeding, Henry B.....735 E. 50th St., Chicago, Ill. '06
†Kahn, Julius, Sherman Sq. Hotel, Broadway and 71st St., New York, N. Y. '97
*Kaishima, Kenzi, Min. Engr., Kaishima Coal Min. Co., Naokata, Fukuokaken, Japan. '08
*Kamiyama, Tatsuzo, Met. Engr., 71 Haramachi, Ichome, Ushigome, Tokyo, Japan. '08
**Kanda, Reiji, Cons. Min. Engr., 18 Nakatonuzakacho Koishikawaku, Tokyo, Japan. '93
*Kane, John I., Min. Engr., Parsons & Kane, Coles Bldg., El Paso, Texas. '11
*Kann, Meyer M., Genl. Mgr., Pittsburg Crushed Steel Co., Ltd., Westinghouse Bldg., Pittsburg, Pa. '95
†Kann, William L., Prest. and Genl. Mgr., Penn-American Plate Glass Co., 2418 Farmers' Bank Bldg., Pittsburg, Pa. '95
*Kano, Shinichi, Mine Inspector, Japanese Government, Osaka Kozan Kantokusho, Osaka, Japan. '11
*Kasahara, Washitaro, Chief Engr., Hibira Copper Mine...Hyuga, Japan. '90
*Kasson, Burt Z.....64 S. Main St., Gloversville, N. Y. '02
*Katsura, Benzo, Prof. of Met., Imperial Tokyo Univ., 58 Sendagi-Machi, Hongo, Tokyo, Japan. '09
**Katsura, Yoichi, Mng. Dir., Mining Dept. of Fujita Co., Dojima, Osaka, Japan. '06
*Kaufman, Harry L., Mine Mgr.....Marquette, Mich. '05
*Kawai, Yasushiro, Min. Engr., Sakito Coal Mines, Sakitomura, Nishisonokigun, Nagasaki, Japan. '91
*Kawamura, Takeshi, Min. Engr.....Osaruzawa Mine, Akita, Japan. '10
**Kayser, Henrich W. F., "Willerden," E. St. Kilda, Melbourne, Vic., Australia. '95
*Keady, Lynn Y., Mining, 926 Chamber of Commerce Bldg., Portland, Ore. '10
*Keating, John B., Min. Engr. and Met., Genl. Supt., Bully Hill Mines. Winthrop, Shasta Co., Cal. '03
*Kedzie, George E., Min. Engr.....Danbury, Brazoria Co., Tex. '88
*Keedy, Dyke V., Cons. Met.....6 Beacon St., Boston, Mass. '10
*Keeley, Frank J., Min. Engr., Met.., 421 Chestnut St., Philadelphia, Pa. '92
*Keeney, Robert M., Met. Engr., 3519 Fifth Ave., Oakland, Pittsburg, Pa. '11
**Keep, William J., Met., Supt., Michigan Stove Co., 753 Jefferson Ave., Detroit, Mich. '88

*Keffer, Frederic, Min. Engr., The British Columbia Copper Co., Ltd., Greenwood, B. C., Canada. '06
**Kehler, Charles R., Company Director.....Instructed to hold all mail. '02
*Kehoe, Henry, Min. Engr.....South 1123 Wall St., Spokane, Wash. '00
*Keighley, Fred. C., Genl. Supt., Oliver & Snyder Steel Co.....Oliver, Pa. '88
*Keiller, Alexander G., Cyanide Chem., Aguacate Mines, San Mateo, Costa Rica, C. A. '02
**Keith, Frank A., Min. Engr.....731 Central Bldg., Los Angeles, Cal. '06
*Keith, Nathaniel S., Min., Met. Engr., Bullitt Bldg., Philadelphia, Pa. '02
*Keller, Arthur H., Min. Engr., Santa Rosa, Dept. Copan, Republic of Honduras, C. A., via New Orleans. '83
*Keller, Cornelius H., Assayer, Wilding & Keller, Apartado 134, Parral, Chihuahua, Mexico. '99
*Keller, Edward, Anaconda Laboratory.....Box 363, Perth Amboy, N. J. '95
*Keller, Hermann A., Min., Met. Engr., 45 Broadway, New York, N. Y. '81
*Kelley, Arthur L., Min. Engr., So. American Development Co., Guayaquil, Ecuador, So. Am. '08
†Kelley, Cornelius F., Attorney-at-Law...Hennessey Bldg., Butte, Mont. '05
*Kelley, William A., Genl. Mgr., U. S. Treasury Mining Co., Chloride, N. M. '02
*Kellogg, Ralph M., Supt., Ely Cons. Copper Co., P. O. Box 71, Ruth, via Ely, Nev. '07
*Kelly, Edward, Mgr., Wharton Furnaces and Mines.....Wharton, N. J. '90
**Kelly, William, Genl. Mgr., Penn Iron Mining Co.....Vulcan, Mich. '90
*Kemler, W. H.....Ashland, Ky. '90
**Kemp, James F., Prof. of Geol.....Columbia University, New York, N. Y. '91
*Kempton, C. W., Min. Engr.....42 Broadway, New York, N. Y. '75
*Kendall, Hugh F., Min. Engr., Supt. of Mines, N. Y. State Steel Co., Virginia, Minn. '99
*Kennedy, Arthur T., Min. Engr., Republic I. & S. Co., 106 E. 3d St., Duluth, Minn. '11
*Kennedy, Eugene P., Min. Engr., Alaska-Treadwell Gold Mining Co., Treadwell City, Alaska. '04
*Kennedy, George Adams, Min. Engr., 2741 Boulevard F, Denver, Colo. '02
*Kennedy, Hugh, Genl. Mgr., Buffalo & Susquehanna Iron Co., 57 Erie County Bank Bldg., Buffalo, N. Y. '81
**Kennedy, Jeremiah J., Cons. Engr.....52 Broadway, New York, N. Y. '02
*Kennedy, John, Min. Engr.....New Wharf, Hobart, Tasmania. '96
*Kennedy, John S.....Chambersburg, Pa. '81
*Kennedy, Joseph E., Mfg. and Engrg., 120 Liberty St., New York, N. Y. '11
*Kennedy, Julian, Cons. Engr.....The Bessemer Bldg., Pittsburg, Pa. '79
*Kennedy, Neil, Min. Engr., Rio Tinto Co., 3 Lombard St., London, E. C., England. '05
*Kennedy, Orran W.....Genl. Supt., H. C. Frick Coke Co., Uniontown, Pa. '93
*Kenney, Henry S., Cons. Engr., Box 3541, Johannesburg, Transvaal, S. A. '06
*Kent, Joseph F., Min. Engr., Genl. Mgr., Stone Branch Coal Co., Stone Branch, W. Va. '02
*Kent, William.....49 Union St., Montclair, N. J. '76
**Kent, William St. G., Met., Civ. Engr., 808 West End Ave., New York, N. Y. '72
*Kenyon, Percy, Min. Engr., Mazapil Copper Co., Concepcion del Oro, Zac., Mexico. '09

*Kepner, Ross B., Min. and Civ. Engr.....Velardena, Dur., Mexico. '11
*Kerr, David G., Chem.....1102 Centre St., Wilkinsburg, Pa. '86
*Kerr, David Gillespie, Engr. and Mgr., Toronto-Brazilian Diamond & Gold Dredging Co., Confederation Life Bldg., Toronto, Ont., Can. '03
*Kerr, Mark B., Cons. Engr.....Mills Bldg., San Francisco, Cal. '90
*Kervin, George A., Asst. Supt.....Mammoth Smelter, Kennett, Cal. '12
*Kervin, J. H.....Care Mammoth Copper Mining Co., Kennett, Cal. '95
*Keyes, Charles R.....944 5th St., Des Moines, Iowa. '99
*Kibe, Kazuye, Min. Engr., Furokura Mine, Oyu-Mura, Akita-Ken, Japan. '10
*Kidder, Sidney J., Genl. Supt., Pittsburg-Silver Peak G. M. Co., Buckhorn, Nev. '12
*Kiddie, John, Assayer, Arizona Copper Co., P.O. Box 201, Morenci, Ariz. '11
*Kiddie, Thomas, Min. and Met. Engr...884 Bute St., Vancouver, B. C., Can. '03
*Kidwell, Edgar, Cons. Engr.....2011 Channing Way, Berkeley, Cal. '97
*Kilbourn, William D., Night Supt., Murray Smelter, Am. Smltg. & Refg. Co., Murray, Utah. '04
*Kimball, Edwin B., Min. Engr., 1205 Alaska-Commercial Bldg., San Francisco, Cal. '97
*Kimball, George K., Jr., Secy. and Mgr., Old Town Consolidated Mining Co., P. O. Box 4, Idaho Springs, Colo. '03
*Kimball, Henry S.....1012 Pierce Bldg., St. Louis, Mo. '05
*Kimmel, Harry R., Chem.....532 E. 112th St., Cleveland, Ohio. '99
*King, Austin J.....P. O. Box 826, Charleston, W. Va. '02
**King, Charles F., Bureau of Buildings, Bronx Borough Hall, New York, N. Y. '80
*King, Edmund M.....Leura, Launceston, Tasmania. '97
*King, Ernest W.....Bozeman, Mont. '99
*King, Frederick G., Cons. Min. Engr., Monadnock Bldg., San Francisco, Cal. '13
*King, Oliver, Min. Engr.....Rand Club, Johannesburg, Transvaal, S. A. '05
*King, Paul S., Cons. Engr.....402 Arcade Bldg., Philadelphia, Pa. '03
†Kingsbury, Harold C., Assayer and Met. Chem., Care J. J. Kingsbury, Supreme Court, Brisbane, Queensland, Australia. '09
*Kingston, Charles B., Cons. Engr., Care Pearce, Kingston & Browne, Worcester House, Walbrook, London, E. C., England. '95
*Kinney, Harry D., Min. Engr....Utah Metal Mining Co., Tooele, Utah. '12
*Kinzie, Robert A., Asst. Supt., Alaska-Treadwell Gold Mining Co., Treadwell City, Alaska. '95
*Kirby, Edmund B., Min. Engr., Met., 701 Security Bldg., St. Louis, Mo. '84
*Kirchen, Charles.....Manhattan, Nev. '05
*Kirchhoff, Charles.....587 Riverside Drive, New York, N. Y. '75
*Kirk, Morris P., Civ., Min. Engr...Newhouse Bldg., Salt Lake City, Utah. '04
**Kirkcaldy, Norman M., Civ., Min. Engr., Kirchenfeld, Berne, Switzerland. '99
*Kirkegaard, Peter, Quebec Bank Bldg., 2 Toronto St., Toronto, Ont., Canada. '99
†Kirkham, George D., Mfr.....262 High St., Warren, Ohio. '13
*Kirkland, Thornton C., Asst. Mgr., Cia. Met. y Refinadora del Pacifico, S. A., Fundicion, Son., Mexico. '12
*Kirkpatrick, Guy H., Min. Engr., Leckie, Kirkpatrick & Co., P. O. Box 1555, Vancouver, B. C., Canada. '00

*Kirkpatrick, Stafford F., Prof. of Met., Kingston School of Mining, 84 Gore St., Kingston, Ontario, Canada. '03
*Kitson, Howard W., Min. Engr.....P. O. Box 1619, Bisbee, Ariz. '09
*Klamt, Augustus J., Min. Engr.....Rhyolite, Nev. '06
*Kleesattel, Richard, Min. Engr.....Vanstone Hotel, Seattle, Wash. '10
*Kleinschmidt, Charles, Mining, Calle Orizaba, No. 42 (Colonia Roma), Mexico City, Mexico. '99
*Kleinschmidt, Franz H., Min. Engr., Blue Jacket Copper Co., Landore, Idaho. '13
*Klepetko, Frank, Min. Engr.....80 Maiden Lane, New York, N. Y. '80
*Klepinger, John H., Asst. Supt., B. & M. Redn. Wks., Anaconda Copper Mining Co., Great Falls, Mont. '12
*Klopstock, Paul, Genl. Mgr., Gold Note Min. & Mill. Co., Kennedy, Nev. '12
**Klug, George C., Min. and Met. Engr., Bewick, Moreing & Co., Melbourne, Vic., Australia. '01
*Klugh, Bethune G., Chem.....P. O. Box 382, Birdsboro, Pa. '07
*Kluttz, Warren L., Asst. Genl. Supt., Thomas Furnaces, Thomas, Ala. '09
*Knapp, George F., E. N. Breitung & Co., Rockefeller Bldg., Cleveland, Ohio. '87
*Knapp, Isaac N., Mech. Engr.....116 Ardmore Ave., Ardmore, Pa. '01
†Knapp, S. A.....235 Montgomery St., San Francisco, Cal. '85
*Kneath, Watkin W.....82 Merriman St., Rochester, N. Y. '05
*Knecht, Carl E., Asst. Engr., Consolidated Mines Selection Co., P. O. Box 2269, Johannesburg, Transvaal, South Africa. '99
**Knight, Cyril W., Geol., Bureau of Mines.....Toronto, Ont., Canada. '07
*Knight, Edward C.....P. O. Box 308, Vancouver, B. C., Canada. '94
*Knoertzer, Henri, Min. Engr.....56 Rue Balagny, Paris, France. '92
*Knowles, Silas A., Mine Supt. and Contractor, 1443 Milwaukee St., Denver, Colo. '04
*Knox, Henry H., Cons. Min. Engr.....82 Beaver St., New York, N. Y. '92
*Knox, Roger C., Mine Mgr., Black Oak Dev. Co.....Soulsbyville, Cal. '03
*Knutzen, Theodor, Met., Supt., Young America Gold Mining Co., Lantana, Va. '90
*Ko, Sokichi, Prof. Econ. Geol.....Kiushiu Univ., Fukuota, Japan. '12
*Kobuse, Junjiro, Met. Engr., 43 Toyokawa-cho, Koishikawa-Ku, Tokyo, Japan. '10
*Koch, Walter E., Min. and Met. Engr.....P. O. Box 718, El Paso, Texas. '86
*Koehler, William, Elec., Chem. Engr., East 4706 Superior Ave., N. E., Cleveland, Ohio. '01
*Koelle, Carl, Met. Supt., Compania Metalurgica Mexicana, San Luis Potosi, Mexico. '96
*Koerting, Berthold, Cons. Min. Engr., Badensche Str. 4, Berlin, Germany. '07
*Kohlbraker, F. H., Supt.....Susquehanna Coal Co., Nanticoke, Pa. '11
*Kojima, Jintaro, Min. Engr., Supt. of Tsudo Mine, Care Ashio Copper Mines, Shimotsuke, Japan. '06
*Kondo, R., Min. Engr., Furukawa Mining Co., Marunouchi, Tokyo, Japan. '88
*Kong, Shun Tet, Board of Industries & Commerce, Canton, Kwantung, China. '08
**Kow, Tong Sing, Cons. Engr.....Address wanted. '90
*Kozminsky, Leslie M., Mine Engr., 6 Burnett St., St. Kilda, Melbourne, Vic., Australia. '09
*Kramer, John F., Asst. Blast Furnace Supt.....Robesonia, Pa. '08

*Kramm, Hugo E., Instructor Econ. Geol. and Mining, P. O. Box E, Phœnix, Ariz. '11
*Krebs, Charles E., Civ. and Min. Engr., Clark & Krebs, 2307 Washington St., Charleston, W. Va. '02
*Krebs, George J., Min. Engr., Supt., Coal Dept., Reading Iron Co., Kimmelton, Pa. '01
*Krejci, Milo W., Met., B. & M. Reduction Works, Anaconda Copper Mining Co., Great Falls, Mont. '98
*Krom, S. Arthur, Min. Engr.....609 Madison Ave., Plainfield, N. J. '09
*Kruemmer, Adolph W., Min. Engr.....Bonn, Germany. '11
*Krumb, Henry, Min. Engr.....402 Felt Bldg., Salt Lake City, Utah. '05
*Kruttschnitt, Julius, Min. Engr., Am. Smelt. & Refin. Co., Fenner Bldg., Tucson, Ariz. '07
*Kuehn, Amor F., Min. Engr., Care A. C. Beatty, 1 London Wall Bldgs., London, E. C., England. '05
*Kunhardt, Wheaton B.....43 Exeter St., Reading, Pa. '80
†Kunz, George F., Gem Expert, Tiffany & Co., 401 Fifth Ave., New York, N. Y. '88
*Kurie, Frank M., Min. Engr., Mgr., 529 Drexel Bldg., Philadelphia, Pa. '97
*Kurtz, Edward L., Instructor in Mining, School of Mines, Columbia University, New York, N. Y. '94
*Kuryla, Michael H., Met. Engr., Merrill Met. Co., 143 Second St., San Francisco, Cal. '08
*Kuzell, Charles R., Met., B. & M. Reduction Dept., Anaconda Copper Mining Co., Great Falls, Mont. '12
**Kwang, Kwong Yung, Dir. & Engr., Lincheng Mines, Lin-Tcheng-sien, Lu-Han Ry., via Peking, North China. '94

*Labarthe, Jules, Mgr.....Mason Valley Mines Co., Thompson, Nev. '10
*La Croix, Morris F., Min. Engr.....Ishpeming, Mich. '11
*Ladd, David H., Met.....Care J. B. Cooper, Hubbell, Mich. '10
*Ladd, George E., Prof. Geol., Min., Prest., Okla. School of Min. and Met., Wilburton, Okla. '98
*La Follette, Harvey M., Prest. and Genl. Mgr., La Follette Coal, Iron & Railway Co., La Follette, Tenn. '05
*Laidlaw, James T., Min. Engr.....Cranbrook, B. C., Canada. '00
*Laird, George A., Cons. Engr., 811 Mills Bldg.....El Paso, Tex. '01
*Laist, Frederick, Met.....Anaconda, Mont. '13
*Lakeland, William J., Mine Supt., Burma Mines, Ltd., Maupuve, Northern Shan States, Burma, India. '04
*Lakenan, Cornelius B., Min. and Mech. Engr.....McGill, Nev. '00
*Lamb, Mark R., Mgr., Allis-Chalmers Co., Casilla 2653, Santiago, Chile, So. Am. '01
*Lamb, Richard, Min., Civ., and Elec. Engr., 136 Liberty St., New York, N. Y. '02
*Lamb, Robert B., Min. Engr., Met., 703 Traders' Bank Bldg., Toronto, Ont., Canada. '05
*Lamb, William H., Jr., Chief Min. Engr., Empire Coal Co., 1216 Brown-Marx Bldg., Birmingham, Ala. '13
*Lampshire, John O., Assayer, Chem.....Address wanted. '04
*Lanagan, William H., Min. Engr.....Nikolaievsk-on-Amur, E. Siberia. '11
*Lancaster, Henry M., Min. Engr.....715 Hutton Bldg., Spokane, Wash. '09

*Lancaster, Thomas, Min. Engr...210 Riverside Drive, New York, N. Y. '06
**Landero, Carlos F. De, Min. Engr., Geol.,
Genl. Mgr., Real del Monte Mining Co., Pachuca, Mexico. '94
*Landers, William H., Min. Engr., 2400 Van Ness Ave., San Francisco, Cal. '03
*Landes, Henry, Prof. of Geol., Univ. of Washington.....Seattle, Wash. '04
**Landfield, Jerome B.....Crocker Bldg., San Francisco, Cal. '02
*Landrum, Charles W., Cons. Engr.....602 Keystone Bldg, Joplin, Mo. '03
**Lane, Alfred C.....Tufts College, Mass. '03
*Lane, Henry M., Cons. Fdy. & Met. Engr., Prest., H. M. Lane Co.,
18 Piquette Ave., E., Detroit, Mich. '09
*Lane, J. S., Mech. Engr..... 50 Church St., New York, N. Y. '80
*Langdon, N. M., Mgr.....Antrim Iron Co., Mancelona, Mich. '81
†Langeloth, J., Prest., American Metal Co., Ltd., 52 Broadway,
New York, N. Y. '90
*Langford, Frank...Care Braden Copper Co., Graneros, Chile, So. Amer. '98
*Langley, Seth S., Min. Engr., 1103 I. N. Van Nuys Bldg., Los Angeles, Cal. '09
**Langton, John, Cons. Engr.....31 Nassau St., New York, N. Y. '01
*Laroza, Enrique E., Min., Elec. Engr., Apartado 777, Lima, Peru, S. A. '06
*Larson, Andrew G., Min. Engr., 809 Bower Bldg., Vancouver, B. C., Can. '04
*Larsson, Per, Genl. Mgr., Nora Bergslags Gemensamma
Grufveförvaltning, Striberg, Sweden. '86
*La Rue, W. G., Mining.....1503 Alworth Bldg., Duluth, Minn. '88
*Laselle, Beach A., Mine Mgr...Cotton Bldg., Vancouver, B. C., Canada. '07
*Lash, Horace W., Vice-Prest. and Met. Engr., Garrett-Cromwell
Engineering Co., New England Bldg., Cleveland, Ohio. '88
*Lashbrooke, Joseph R.....1618 Rockwood St., Los Angeles, Cal. '08
*Lasier, Frederick G., Min. Engr.....Birmingham, Mich. '07
†Lasley, Theodore H., Contractor.....Chattanooga, Tenn. '05
*Lasley, William M., Prest., Southern Clay Manufacturing Co.,
First National Bank Bldg., Chattanooga, Tenn. '00
*Lass, Will P., Assayer and Surveyor .....Treadwell, Alaska. '05
*Lassiter, Robert G., Mine Mgr..... Virgilina, Va. '09
*Lathrop, Lloyd J., Mine Surveyor...P. O. Box 250, Virginia City, Nev. '13
*Laube, Frederick E., Assayer. .1710 Eldridge Ave., Bellingham, Wash. '08
*Laucks, Irving F., Min. Engr.....95 Yesler Way, Seattle, Wash. '12
*Lauder, George, Home Trust Co..... Hoboken, N. J. '78
*Lauder, William, Genl. Mgr ..... Colonial Iron Co., Riddlesburg, Pa. '02
*Laudgrebe, Karl L., Supt. Blast Furn., Tenn. C., I. & R.R. Co.,
Ensley, Ala. '12
*Laudig, O. O., Supt. Blast Furn., Tata Iron & Steel Co., Sakchi,
Bengal (Magpur Ry.), India. '93
*Laughlin, James B., Treasurer, Jones & Laughlin Steel Co., Pittsburg, Pa. '97
*Laurie, Frank C., Oil Geol., Exploration Dept., Cia. Mexicana de
Petroles, "El Aguila," S. A., Minatitlan, V. C., Mexico. '10
*Lavagnino, G., Min. Engr., Prest. and Mgr., The Conglomerate Mining Co.,
P. O. Box 550, Salt Lake City, Utah. '85
*Lavery, Vaughan M., Min. Engr., 1113 McCormick Bldg., Chicago, Ill. '09
*Law, Archibald F., Prest. and Mgr. Coal Companies, Scranton, Pa. '11
*Law, John B., Min. Engr.....115 York Ave., Pittston, Pa. '91
*Law, Robert B., Min. and Mech. Engr., Siam Forest Co., Ltd.,
Bangkok, Siam. '08
*Lawall, Elmer H., Min. Engr.....Wilkes-Barre, Pa. '98

*Lawrence, Benjamin B., Cons. Min. Engr., 60 Wall St., New York, N. Y. '82
*Lawrence, Charles E., Supt. of Mines.....Iron Mountain, Mich. '93
*Lawrence, Schuyler, Min. Engr., Lawrence & Jacobs,
Apartado No. 3, Chihuahua, Mexico. '99
*Lawrence, Thomas J.....Topia, Durango, Mexico. '02
*Lawrence, Walter L., Min. Engr.....719 Delaware St., Scranton, Pa. '83
*Lawrence, Willis, Genl. Supt., Chosen Mining Co.,
Ko Sung Mines, Yeng Byen, Korea. '08
*Lawrie, Harold N., Min. Engr., Portland Analytical Laboratory,
622 Worcester Bldg., Portland, Ore. '07
*Lawry, Arthur H., Min. Engr., Montana-Tonopah Min. Co.,
Tonopah, Nev. '05
*Lawton, Nathan O., Min. Engr., Supt., Miami Copper Co., Miami, Ariz. '10
*Lay, Henry C., Civ. and Min. Engr.....P. O. Box 156, Telluride, Colo. '89
*Lea, James, Cyanide Mgr.....Box 1392, Johannesburg, Transvaal, S. A. '07
*Leacey, Fred. J.....Care Northern Malleable Iron Co., St. Paul, Minn. '98
*Leaning, Eugene H., Genl. Mgr., Nav Aug Coal Co.....Scranton, Pa. '12
†Leary, Daniel J., Contracting Engr...26 West 49th St., New York, N. Y. '81
*Leavell, John H.....Newhouse Bldg., Salt Lake City, Utah. '07
*Leavitt, E. D., Mech. Engr.....33 Garden St., Cambridge, Mass. '76
*Le Boutillier, Clement, Chem. and Met., Taylor Iron & Steel Co.,
High Bridge, N. J. '91
Le Chatelier, Prof. Henri Louis.....Ecole des Mines, Paris, France.
*Leckie, John E., Min. Engr., P. O. Box 1555, Vancouver, B. C., Canada. '11
*Leckie, Robert G., Min. Engr., Prest., Torbrook Iron Co.,
Sudbury, Ont., Canada. '79
*Leckie, R. G. Edwards.....P. O. Box 1555, Vancouver, B. C., Canada. '91
**Ledoux, Albert R., Min. Engr. and Assayer, Ledoux & Co.,
99 John St., New York, N. Y. '89
**Ledoux, Frederic, Ingénieur Civil des Mines, Société Minière et
Métallurgique de Penarroya, 12 Place Vendôme, Paris, France. '97
*Lee, Arthur H., Supt. Blast Furn., Lackawanna Steel Co., Buffalo, N. Y. '87
*Lee, Chester F., Min. Engr.....444 Henry Bldg., Seattle, Wash. '03
*Lee, George B., Min. Engr. and Met., Supt.,
Copper Queen Reduction Works, Douglas, Ariz. '04
*Lee, Marcellus P., Engr.....1025 Summit Ave., Corsicana, Tex. '05
*Lee, Montrose L., Min. Engr., for Clark, Dodge & Co.,
P. O. Box 71, Basin, Mont. '10
*Lee, Richard Henry....Supt. Blast Furn., Penna. Steel Co., Lebanon, Pa. '83
**Leer, I. Wayne von, Civ., Min. Engr.....Instructed to hold all mail. '05
*Leese, Neville, Genl. Mgr., Queensland Exploration Co., Ltd.,
Cloncurry, Queensland, Australia. '05
*Le Fevre, Henry F., Min. Engr.....71 Broadway, New York, N. Y. '93
*Le Fevre, Solomon, Witherbee, Sherman & Co., Mineville, Essex Co., N. Y. '93
*Leffingwell, William H., Chief Engr.....Mono Power Co., Bishop, Cal. '01
**Leggat, Alexander, Min. Engr.....P. O. Box 15, Butte, Mont. '02
**Leggett, Thomas H., Cons. Engr., Min. Dept., Am. Smelt. &
Refin. Co., 165 Broadway, New York, N. Y. '82
*Lehmer, Frank W., Supt., Cia. Minera Zapoteca, Ocotlan, Oaxaca, Mexico. '02
*Leibfried, John E., Cement Expert.....19 N. Main St., Bethlehem, Pa. '08
*Leisenring, Albert C., Genl. Mgr. of Mines.....Lost Creek, W. Va. '11

*Leith, Charles K., Geol., Prof. Econ. Geol., Univ. Wisconsin, Madison, Wis. '03
*Leland, Everard, Min. Engr., Leonard Copper Co.....Gleeson, Ariz. '12
*Leland, Frank M., Prest. and Acting Mgr., Empire Copper Co,, Mackay, Idaho. '06
*Lemmon, David.....Columbus Extension Mining Co., Alta, Utah. '10
*Lempriere, Oscar T.....506 Little Collins St., Melbourne, Vic., Australia. '01
*Le Noir, Frank H., Assayer and Surveyor.....Douglas, Alaska. '11
*Lentz, William O., Mng. Partner.....Lentz & Co., Mauch Chunk, Pa. '85
*Leonard, R. W., Min. Engr.....St. Catharines, Ontario, Canada. '94
*Leonard, William A., Treas., Tremont Nail Co.....West Wareham, Mass. '89
*Leslie, Hugh M., 10 St. Andrews Drive, Pollokshield, Glasgow, Scotland. '97
**Lessner, Charles B., Met. Chem.....Carril, Spain. '07
**Levat, David, Min. Engr.....174 Boulevard Malesherbes, Paris, France. '87
*Levensaler, Lewis A., Min. Engr., Tacoma Smelting Co., Tacoma, Wash. '03
*Le Wald, E. A., Civ., Min. Engr.....504 Empire Bldg., Denver, Colo. '87
†Lewis, Albert.....Bear Creek, Luzerne Co., Pa. '91
*Lewis, Arthur H., Dist. Supt., Lehigh Valley Coal Co., 542 N. Laurel St., Hazleton, Pa. '08
**Lewis, Clancey M., Prof. Min. Engrg., 317 Pacific Block, Seattle, Wash. '99
*Lewis, Francis B., Genl. Mgr., Witwatersrand G. M. Co., Ltd. Box 1, Knights, Transvaal, So. Africa. '03
*Lewis, Grenville, Prest. and Genl. Mgr., Ideal Block Coal Co., P. O. Box 2, Lily, Ky. '10
*Lewis, Henry M., Jr., Min. Engr.....P. O. Box 192, Park City, Utah. '08
*Lewis, J. Volney, Prof. of Geol., Rutgers College, New Brunswick, N. J. '95
*Lewis, James B.....31 Queen St., Melbourne, Vic., Australia. '06
*Lewis, Robert S., Asso. Prof. Min., Univ. of Utah, Salt Lake City, Utah. '06
*Lewisohn, Julius A., Min. Engr.....42 Broadway, New York, N. Y. '08
*L'Hame, William E., Min. Engr.....Lock Box 18, Covelo, Cal. '07
*Libbey, Fay W., Min. Engr.....Wickenburg, Ariz. '12
*Liddell, T. Parker, Min. Engr., U. S. Deputy Mineral Surveyor, Battle Mountain, Nev. '03
**Lidgerwood, John H., Jr., Mining Machinery.....Morristown, N. J. '02
*Lidner, Per G., Min. Engr.....130 Lexington Ave., New York, N. Y. '91
*Lihme, Christian B.....1350 N. State St., Chicago, Ill. '99
*Lihme, I. P., Chem. Engr.....Grasselli Chemical Co., Cleveland, Ohio. '92
†Lilly, John, Lawyer.....Lambertville, N. J. '96
*Limbach, Edmund C., Supt....Tillicum Development Co., Loomis, Wash. '12
*Linck, Frederick W., Min. Engr., Genl Mgr., Harrison, Ainslie & Co., Ltd., Lindal Moor Mines, Ulverston, Lancashire, England. '99
*Lincoln, Francis C., Asso. Prof. Min. Engrg., University of Illinois, Urbana, Ill. '03
*Lincoln, Frederick B., Asst. to Receiver, The Pittsburg, Shawmut & Northern R. R. Co., Angelica, N. Y. '03
*Lincoln, John J., Genl. Mgr., Upland Coal & Coke Co., Elkhorn, W. Va. '99
*Lindau, Sam P., Chem.....Ray, Ariz. '12
*Lindberg, Carl O., Min. Engr., with W. R. Cox and staff, 527 Union League Bldg., Los Angeles, Cal. '07
*Lindeberg, Jafet, Mining.....Pioneer Mining Co., Nome, Alaska. '04
*Lindgren, Waldemar, Geol., Mass. Institute of Technology, Boston, Mass. '00
†Lindley, Curtis H., Lawyer.....604 Mills Bldg., San Francisco, Cal. '98

*Lindsay, John A. M., Mech. Engr., Broken Hill Proprietary Co., Ltd., Broken Hill, New South Wales, Australia. '99
††Lindsay, Lionel.....Crocker Bldg., San Francisco, Cal. '05
*Lindsay, Lycurgus, Mining.....627 Security Bldg., Los Angeles, Cal. '03
*Lindsey, James, Min. Engr.....516 Chamber of Commerce, Portland, Ore. '01
*Lindsley, Halstead, Min. Engr., Lindsley & Livermore, 60 State St., Boston, Mass. '04
*Linforth, Frank A., Asst. Geol., Amalgamated Copper Mining Co., 626 Hennesy Bldg., Butte, Mont. '08
*Lingle, Chester M., Genl. Mgr.....Graceton Coke Co., Graceton, Pa. '03
*Linhardt, Harvey W., Blast Furn. Engr., Columbus Iron & Steel Co., Columbus, Ohio. '12
*Linn, William J., Mining.....2629 Michigan Ave., Chicago, Ill. '07
*Linney, William H., Min. Engr., 2805 W. Mission St., Spokane, Wash. '06
*Linton, Raymond A., Min. Engr.....Saginaw, Mich. '11
*Linton, Robert, Min. Engr., Genl. Mgr., Sierra Cons. Mines Co., Trust & Savings Bldg., Los Angeles, Cal '00
*Linville, C. P., Supt. Blast Furnaces for J. E. Thropp.....Everett, Pa. '04
*Lippincott, Joseph B., Civ. Engr., 1108 Central Bldg., Los Angeles, Cal. '11
*Lippincott, Warren B., Chem.....Mariposa Min. Co., Carthage, Mo. '97
*Lipscomb, Robert A., Furnace Supt.....Low Moor, Va. '12
*Lisboa, Miguel A. R., Min. Engr., 426 Praia de Botafogo, Rio de Janeiro, Brazil, S. A. '02
*Litchman, Harold B., Prof. Min. Engrg., 10 High St., Marblehead, Mass. '09
**Little, Archibald.....4 London Wall Bldgs., London, E. C., England. '01
*Little, James B., Mine Mgr..... Selukwe, Rhodesia, So. Africa. '99
*Little, James E., Mech. Engr., Spanish-American Iron Co., Steelton, Pa. '09
*Livermore, Thomas L., Jr., Mine Mgr.....Telluride, Colo. '05
*Livingstone, Charles H.....1234 Humboldt St., Denver, Colo. '89
*Livingstone, Robert, Inspector of Mines...Lethbridge, Alberta, Canada. '09
*Llewellyn, Arthur, Min. Engr., Care John Taylor Sons, 6 Queen St. Place, London, E. C., England. '97
*Locke, Augustus, Min. Engr.....Hampton, N. H. '11
*Locke, Charles E., Asst. Prof. of Min. Engrg. and Met., Mass. Institute Technology, Boston, Mass. '04
*Locke, Franklin B.....North Adams, Mass. '89
*Lodge, Richard W.....P. O. Box 84, Redlands, Cal. '83
†Loeb, Carl M., Vice-Prest. American Metal Co., 52 Broadway, New York, N. Y. '12
*Loewenstein, Hans von und zu, Mgr. of the Dortmund Mining Asso., 2 Friedrichstrasse, Essen-Ruhr, Germany. '07
*Logan, John W., Mgr., Steel Wks. Dept., Alan Wood Iron & Steel Co., Conshohocken, Pa. '12
*Logan, Spencer R., Construction Engr., Utah Power & Light Co., Telluride, Colo. '11
*London, Clarence J., Mining.....5525 Walnut St., Philadelphia, Pa. '11
*Long, James I., Genl. Mgr., Hidalgo Mining Co., Parral, Chih., Mexico. '97
*Longacre, Orleans.....Poland, Ariz. '81
*Longan, Walker B., Min. Engr., Am. Smelting & Refining Co., Charcas, S. L. P., Mexico. '12
*Longwell, Alexander, Min. Engr., 24 Adelaide St., W., Toronto, Ont., Can. '09

*Longworth, William, Mine Mgr., Ocean House, Moore St., Sydney, New So. Wales, Australia. '04
*Longyear, E. J., Min. Engr...710 Security Bank Bldg., Minneapolis, Minn. '92
†Lonsbery, George A., Mine Mgr., Title Insurance Bldg., Los Angeles, Cal. '12
*Loomis, Burdett, Gas Engr.....Hartford, Conn. '91
*Loomis, Edward E., Vice-Prest., Delaware, Lackawanna & Western R. R., 90 West St., New York, N. Y. '99
*Loomis, Willis H., Coal Mining.....Lansford, Pa. '11
*Loram, Sydney H., Min., Met. Engr., 49 Buxton Rd., Clingford, Essex, Eng. '97
*Loring, Edward A., Min. Engr., 62 London Wall, London, E. C., Eng. '12
*Loring, Frank C., Min. Engr., Home Life Bldg., Toronto, Ont., Canada. '07
*Loring, William J., Bewick, Moreing & Co., 62 London Wall, London, E. C., England. '01
**Louis, David A., Min. Engr., Met.....123 Pall Mall, S. W., London, Eng. '91
*Louis, Henry, Prof. of Mining, 4 Osborne Terrace, Newcastle-upon-Tyne, England. '88
*Loux, Carl H., Sampler.....Rossland, B. C., Canada. '13
*Lovejoy, Ellis, Cons. Min. Engr.....Schultz Bldg., Columbus, Ohio. '86
*Low, V. F. Stanley, Civ. and Min. Engr., Care Nat. Bank of Australasia, Bishopsgate St., London, E. C., England, '01
*Lowe, Henry P., Min. Engr .....Central City, Colo. '96
*Lower, Joseph B., Supt., Chintui & Candlestick Camps, Oriental Cons. Mining Co., Unsan, Chosen, Korea. '12
*Lucas, Anthony F., Min. Engr., 1406 16th St., N. W., Washington, D. C. '95
*Lucas, Frank E., Supt., Coke Oven Dept., Dominion Iron & Steel Co., Sydney, N. S., Canada. '13
*Lucas, John R., Mine Mgr.....Philipsburg, Mont. '06
*Luce, Wilson A., Asst. Genl. Mgr., Ellsworth Collieries Co., 2216 Farmers Bank Bldg., Pittsburg, Pa. '03
*Lucke, Percy K., Min. Engr., Departmento de Minas, Cia. Minera de Peñoles, Ojuela, Dur., Mexico. '06
*Ludlow, Edwin, 2d Vice-Prest., Lehigh Coal & Nav. Co.....Lansford, Pa. '93
*Lund, Iens.....64 Clyde Rd., Addiscombe, Surrey, England. '03
*Lundberg, John, Min. Supt.....79 P St., Salt Lake City, Utah. '03
*Lundbohm, Hjalmar.....P. O. Box 236, Stockholm, Sweden. '92
**Lunt, Horace F., Min. Engr.....Gazette Bldg., Colorado Springs, Colo. '03
*Lustosa, Joaquim de Almeida, Civ., Min. Engr., "Morro de Mina," Manganese Mining Co. Lafayette, Minas Geraes, Brazil, S. A. '05
*Luther, E. C., Min. Engr.....Pottsville, Pa. '05
*Lyle, Lieut.-Col. David A.....St. Davids, Delaware Co., Pa. '88
**Lyman, Benjamin S., Min. Engr.....708 Locust St., Philadelphia, Pa. '71
**Lyman, Frank, Treas., Low Moor Iron Co. of Virginia, Tontine Bldg., 88 Wall St., New York, N. Y. '77
†Lyman, Frederick W.....700 Oneida Block, Minneapolis, Minn. '06
*Lyman, Robert H., Mgr., Seneca Superior Silver Mines, Ltd., Cobalt, Ont., Canada. '96
*Lyon, Dorsey A.....P. O. Box 83, Oakland Sta., Pittsburg, Pa. '09

*McAllen, John L., Min. Engr.....328 Hassalo St., Portland, Ore. '13
*McAllister, J. Edgar.....15 King St., W., Toronto, Ont., Canada. '05
*McArthur, Robert A., Min. Engr., Parrot Silver and Copper Co., 817 West Silver St., Butte, Mont. '00
*McAulay, Duncan F., Mine Mgr., Great Boulder Perseverance G. M. Co., P. O. Box 94, Fimiston, West. Australia. '07

*McAuliffe, Eugene, Genl. Coal Agt., Frisco Lines, 916 Frisco Bldg., St. Louis, Mo. '09
*McBride, Wilbert G., Min. Engr., Genl. Supt., Great Western Copper Co., Courtland, Ariz. '06
*McCaffery, Richard S., Min. Engr.....Moscow, Idaho. '95
*McCallie, Samuel W., State Geologist ....Atlanta, Ga. '09
†McCallum, William H., Mech. Engr., 6602 Germantown Ave., Philadelphia, Pa. '84
*McCann, Ferdinand, Min. Engr., Met., Mgr., El Tajo Mining Co., San Sebastian, Jal., Mexico. '02
*McCart, Robert, Jr., Min. Engr., Genl. Mgr., Indé Gold Min. Co., Indé, Dur., Mexico. '09
*McCarthy, Edward T., Min. Engr., 10 Austin Friars, London, E. C., Eng. '97
*McCarthy, James F., Mgr., Hecla Min. Co.....Wallace, Idaho. '09
*McCarthy, M. E., Min. Engr., Globe Consolidated Copper Co., Globe, Ariz. '97
*McCarty, Edward P., Prof. of Mining, Minnesota School of Mines, University of Minnesota, Minneapolis, Minn. '03
*McCarty, George J., Vice-Prest., Mercantile Banking Co., Ltd., Avenida de San Francisco 12, Mexico City, Mexico. '01
*McCaskell, Jasper A., Min. Engr., 503 Felt Bldg., Salt Lake City, Utah. '04
*McCaskey, Hiram Dryer, Min. Geol., U. S. Geological Survey, Washington, D. C. '05
*McCausland, Ross D., Mining.....Apartado 299, Chihuahua, Mexico. '08
*McCay, Le Roy W., Prof. Inorg. Chem., Princeton Univ., Princeton, N. J. '85
*McChrystal, Jackson C.....723 Kearns Bldg., Salt Lake City, Utah. '01
*McChrystal, John Henry.....P. O. Box F, Eureka, Utah. '03
*McClave, James M., Met., Lippincott & McClave, 601–02 Ideal Bldg., Denver, Colo. '05
*McCleary, William B., Mine Mgr..... .....Helvetia, Ariz. '03
*McClelland, James F.....Drawer C, Yale Sta., New Haven, Conn. '03
*McClintock, William H., Mining.....Tuolumne, Cal. '98
*McClure, Alexander P., Blast Furn. Supt., 1830 E. 101st St., Cleveland, Ohio. '13
*McClure, David, Mine Supt., Care E. C. Hutchinson, 409 Montgomery St., San Francisco, Cal. '00
*McClure, Samuel, Genl. Mgr., Stewart Iron Co., Sharon, Mercer Co., Pa. '91
*McCollom, C. R., Min. Engr.....486 California Terrace, Pasadena, Cal. '08
*McComas, Kenneth W., Chem., Assayer.....Box 174, Perth Amboy, N. J. '07
*McCord, William H., Min. and Met. Engr., The Providencia Mining & Milling Co., Apartado 67, Guanajuato, Mexico. '99
*McCormack, G. B., Prest., Pratt Consolidated Coal Co., P. O. Box 42, Birmingham, Ala. '91
*McCormick, Edward, Min. Engr.....Buhl, Minn. '97
*McCormick, Henry, Jr., Central I. & S. Co., Cameron Bldg., Harrisburg, Pa. '92
*McCormick, Vance C., Mayor.....223 Market St., Harrisburg, Pa. '94
**McCosh, Andrew K., Jr., Coal and Iron Master, Gartsherrie Iron Works, Coatbridge, Scotland. '11
*McCourt, Walter E., Geol., Dept. Geol., Washington Univ., St. Louis, Mo. '06
*McCreath, Andrew S., Chem.....121 Market St., Harrisburg, Pa. '75
*McCreath, Lesley, Chem..... ....121 Market St., Harrisburg, Pa. '02
**McCreery, J. Harold, Engrg. Asst. .....49 Wall St., New York, N. Y. '89
*McCunn, George B., Min. Engr., Nova Scotia Steel & Coal Co., Wabana, Newfoundland. '13

*McDaniel, Alexander K., Min. Engr....111 W. 4th Ave., Denver, Colo. '02
*McDermott, Walter, Min. and Met. Engr.,
3 London Wall Bldgs., London, E. C., England. '74
*McDevitt, James E.....14 Taconic St., Pittsfield, Mass. '06
*McDonald, Joseph A., Genl. Supt., Ohio Steel Works,
Carnegie Steel Co., Youngstown, Ohio. '00
*McDonald, Samuel.....1955 Huntington Drive, So. Pasadena, Cal. '85
*McDonald, Thomas, Genl. Supt., Ohio Works and Furnaces and
Niles Furnace, Carnegie Steel Co., Youngstown, Ohio. '90
*McDougall, Wallace D., Red Court Hotel, 20 Bedford Place,
London, W. C., England. '06
*McDowell, J. C., Vice-Prest. and Genl. Mgr., Union Natural Gas
Corporation, 1206 Farmers' Bank Bldg., Pittsburg, Pa. '94
*McEwen, A. Francis, Min. Engr., P. O. Box 65, Maraisburg,
Transvaal, So. Africa. '09
*McGee, John, Min. Engr., Genl. Mgr., United Greenwater Copper Co.,
Dale, Cal. '05
*McGinnis, Richard B., Min. Engr.....Mills Bldg., San Francisco, Cal. '12
*McGrath, John, Bus. Mgr., Griffin Min. & Smelt. Co., Apartado 5115,
Mexico City, Mexico. '02
*McGrew, Edward, Civ., Min. Engr., 1863 Clayton Ave., N. S.,
Pittsburg, Pa. '05
*McIlvain, Edward M., Prest., Lehigh Coke Co., 71 Broadway,
New York, N. Y. '86
†McIlvain, J. Gibson.... . .58th St. and Woodland Ave., Philadelphia, Pa. '01
*McIlvain, William R., Retired Iron Master, Prest., Reading Gas Co.,
Reading, Pa. '92
*McIntire, Robert, Min. Engr., Keating G. M. Co.....Radersburg, Mont. '12
*McIntosh, Joseph B. S., Cons. Engr., United Verde Copper Co.,
Prescott, Ariz. '09
*McIntyre, John E., Min. Engr.....P. O. Box 122, Nogales, Ariz. '12
*McKaig, John S.....Care N. J. Zinc Co., Franklin Furnace, N. J. '04
*McKay, Hood, Prest., O. S. Richardson Coal Co., 203 S. Dearborn St.,
Chicago, Ill. '03
*McKay, Richard V...Supt. Blast Furnaces, Penna. Steel Co., Steelton, Pa. '12
*McKechnie, Benjamin E., Min. Engr., Penna. Steel Co.,
847 Maple St., Lebanon, Pa. '07
*McKee, Arthur G., Contr. and Cons. Engr., 1303 Rockefeller Bldg.,
Cleveland, Ohio. 12
*McKee, John A.....75 S. Root St., Aurora, Ill. '02
*McKee, William C., South Bay Hotel, Aldis Ave.,
Indiana Harbor, Ind. '12
*McKenna, Alexander G., Met., Chem., Firth Sterling Steel Co.,
Hamilton Road, Congress Heights, Washington, D. C. '96
*McKenna, Charles F., Anal. Chem.....50 Church St., New York, N. Y. '94
**McKillop, John, Care W. Muller....16 Grape St., London, W., England. '93
*McKim, John W., Min. Engr., 532 Dooly Block, Salt Lake City, Utah. '07
*McKinlay, William B., Min. Engr.. .....15 Broad St., New York, N. Y. '02
†McKinney, R. C., Prest., Niles-Bement-Pond Co.,
111 Broadway, New York, N. Y. '86
*McKinnis, Charles, Mining.....Wallace, Idaho. '12

*McLanahan, J. King, Iron Mfr. and Miner.....Hollidaysburg, Pa. '81
*McLanahan, John King, Jr., Secy., American Lime & Stone Co., Hollidaysburg, Pa. '04
*McLean, Milton H., Mine Foreman..... .....Morenci, Ariz. '09
*McLeavy, John, Mine Mgr.....John McLeavy & Co., Punxsutawney, Pa. '75
*McLeod, Alexander C. S., Battery Mgr., 356 Danks St., Middle Park, Melbourne, Vic., Australia. '07
*McLeod, Howard D., Mgr., Min. Dept., Seattle Const. & Dry Dock Co., Seattle, Wash. '12
*McLintock, Archibald, Surveyor and Engr.....Talcville, N. Y. '03
*McLure, Charles D., Min. Engr.....822 Security Bldg., St. Louis, Mo. '88
*McMahan, Charles H.....1217 Adams St., Denver, Colo. '95
*McMahon, Frederick J., Mech. Engr.....Wilkes-Barre, Pa. '11
*McManaman, James H., Mine Supt., Careyville Coal Co., Careyville, Tenn. '08
*McMaster, Alexander T. C., Min. Engr., 659 Spadina Ave., Toronto, Ont., Canada. '08
*McMillan, Anthony J., St. Andrews, Kenilworth, Warwickshire, England. '08
*McMurray, Max.....Perry Payne Bldg., Cleveland, Ohio. '02
*McNair, Fred W., Prest., Michigan College of Mines, Houghton, Mich. '12
*McNaugher, David W., Civil Engr., Robert W. Hunt & Co., Monongahela Bank Bldg., Pittsburg, Pa. '96
*McNeill, Walter F., Sec.-Treas., Western Coal Operators Asso., 301 Judge Travis Bldg., Calgary, Alta., Canada. '07
*McNulty, Samuel G., Vice-Prest. and Genl. Mgr., The Thacker Coal Min. Co., Rose Siding, W. Va. '02
*McPherson, William B., Mine Mgr., 2301 W. 20th St., Los Angeles, Cal. '09
*McRandle, William E., Mine Supt.....Bessemer, Mich. '11
*Maben, J. C., Jr., Vice-Prest., Sloss-Sheffield Steel & Iron Co., Birmingham, Ala. '12
*MacArthur, John S., Min. Engr. and Met., 6 Broad St. Place, London, E. C., England. '92
*Macauley, Rupert M., Asst. Mine Supt., Canadian Copper Co., Copper Cliff, Ont., Canada. '11
*Maccallum, N. E., Supt., Steel Plant, Phœnix Iron Co., Phœnixville, Pa. '02
*MacCarthy, Marion S.....2045 Birch St., Denver, Colo. '12
*Macco, Heinrich, Civ. and Met. Engr.....Siegen, Germany. '92
*Macdonald, Arthur C., Macdonald, Gibbs & Co., 54 New Broad St., London, E. C., England '05
*MacDonald, Bernard, Cons. Engr., San Patricio Min. & Mill. Co., Calle Mercaderes 33, Parral, Chih., Mexico. '89
*Macdonald, Charles, Civ. Engr.....115 Broadway, New York, N. Y. '75
*MacDonald, Jesse J., Met. Engr., Magna Plant, Utah Copper Co., Garfield, Utah. '00
*Macdonald, Joseph, Guanajuato Consolidated M. & M. Co., Apartado 33, Guanajuato, Mexico. '96
*MacDonald, Michael E., The Mines Selection Co. of Mexico, 35 Wall St., New York, N. Y. '02
*MacDonald, William T., Min. Engr., Mill Supt., Chino Copper Co., Hurley, N. M. '01
*Macdougal, Charles W., Chief Engr., Hancock Consolidated Mining Co., Hancock, Mich. '04

*MACFARLANE, GRAHAM .....1401 Lincoln Bldg., Louisville, Ky. '86
*MACFARLANE, RIENZI W., Min. Engr.
Apartado 102, Parral, Chih., Mexico. '02
*MACFEE, ROBERT, Met., 15 Alexandra Grove, Charlton-on-Medford,
Manchester, England. '12
*MACGEORGE, ALEXANDER J., Min. Engr., Care R. M. Turner, 99 Queen St.,
Melbourne, Victoria, Australia. '97
*MACIA, JAMES H., Supt., Tombstone Cons. M. & M. Co., Ltd.,
P. O. Box 555, Tombstone, Ariz. '09
*MACKAY, ANGUS, Mining and Milling.....Juneau, Alaska. '87
*MACKAY, ANGUS R., Min. Engr..... Wickenburg, Ariz. '96
*MACKAY, HENRY S., Min. Engr., Mac Kay Copper Process Co.,
Norwich, Conn. '06
*MACKAY, PHILIP A., "Illinois," Winnuera Pl., St. Kilda,
Melbourne, Vic., Australia. '99
*MACKAY, WALTER, Mining.....723 Park Ave., Portland, Ore. '87
*MACKENZIE, G. S., Met., Sydney Tin Smelting Co., Woolwich, N.S.W., Aust. '87
*MACKILLIGIN, ALFRED M., Min. Engr., Hurstbourne Tarrant,
Andover, Hants, England. '08
*MACLENNAN, FRANK W., Min. Engr.....P. O. Box 100, Miami, Ariz. '04
*MACNAUGHTON, JAMES, Min. Engr., Genl. Mgr.,
Calumet & Hecla Mines, Calumet, Mich. '90
**MACNEILL, CHARLES M., Vice-Prest. and Genl. Mgr.,
U. S. Reduction & Refining Co., Colorado Springs, Colo. '99
*MACNUTT, CHARLES H.....Instructed to hold all mail. '90
*MACOMB, JOHN DE N., JR., Asst. Engr., A. T. & S. F. R. R. System,
Topeka, Kan. '00
*MADGE, WILLIAM C., Mech. and Met. Engr.,
62 London Wall, London, E. C., England. '12
*MAGEE, JAMES F., Asst. Supt., El Cuero Mines, Santiago de Cuba, Cuba. '13
*MAGNUSON, MARK G.....2002 Second Ave. S., Minneapolis, Minn. '05
*MAIGNEN, PROSPER A., Hyd. Chem. Engr., 52 N. 13th St., Philadelphia, Pa. '08
*MAIN, ALFRED F., Genl. Mgr., El Oro Mining and Railway Co., Ltd.,
El Oro, Mexico, Mexico. '02
*MAINWARING, HUGH M. C., Min. Surveyor, Care Chillagoe Railway and
Mines, Ltd., Chillagoe, Queensland, Australia. '99
*MAITLAND, GEORGE C., Min. Engr., 22 Clareville Grove, So. Kensington,
London, S. W., England. '00
*MAIZ, JOAQUIN, Banker, Merchant, Apartado 102, Monterey, N. L., Mex. '03
*MAKITA, TAMAKI, Min. Engr., Chief Engr. to Miike Coal Mines,
Mitsui Mining Co., Tokyo, Japan. '00
*MALCOLMSON, CHARLES T., Prest., Malcolmson Briquet Engrg. Co.,
Old Colony Bldg., Chicago, Ill. '07
*MALCOLMSON, JAMES W., Cons. Engr., Lucky Tiger Combination G. M. Co.,
1012 Baltimore Ave., Kansas City, Mo. '90
†MALCOMSON, A. BELL, JR., Municipal Engr..... .. ..Orange, N. J. '08
*MALINS, FRANCIS A., Min. Engr..... ....Address wanted. '97
*MALTITZ, EDMUND VON, Met. Engr.....Dortmund, Germany. '06
*MANAHAN, ROBERT F., Min. Engr.,
Minas Tecolotes, Santa Barbara, Chih., Mexico. '11
*MANION, EDWARD, Leasing Mines.....221 S. Main St., Lead, S. D. '12
*MANLEY, FRANK AUSTIN, Asst. Genl. Mgr., Union Pacific Coal Co.,
1121 Union Pacific Bldg., Omaha, Neb. '02

*Manley, Henry L., Min. Engr.....1152 Eastlake Ave., Seattle, Wash. '93
*Mann, William S., Min. and Met. Engr., Mill Supt.,
N. Y. & Honduras Rosario Mining Co., San Juancito, Honduras, C. A. '01
*Mannakee, Nathan H., Civ. and Min. Engr.....Williamson, W. Va. '08
*Mannesmann, Robert.....Remscheid, Germany. '90
*Mannheim, Ernest A., Min. Engr., A. P. Griffiths, Mannheim & Co.,
Salisbury House, London, E. C., England. '01
*Mannheim, P. A. L., Met.....76 Warren St., New York, N. Y. '89
*Manning, John F., Min. Engr., Seoul Mining Co.,
Care Dr. J. H. Wells, Pyeng Yang, Korea. '07
†Manning, William E., Asst. Genl. Mgr. of Sales, Youngstown Sheet
and Tube Co., Stambaugh Bldg., Youngstown, Ohio. '10
*Mansfield, Melvin, Min. Engr., Assayer, Chino Copper Co., Hurley, N. M. '11
*Mansfield, Nathan T.....2124 Parker St., Berkeley, Cal. '96
**Marengo, Paolo, Min. Engr.....Sturla, Genova, Italy. '04
*Markle, Alvan.....Markle Banking and Trust Co., Hazleton, Pa. '85
*Markle, John, Min. Engr.....G. B. Markle & Co., Jeddo, Pa. '79
*Marquard, William B., Instructor in Mining,
Lafayette College, Easton, Pa. '11
*Marr, Robert A., Met. Engr.....Union, Ore. '03
**Marriner, John T., Pahang Consolidated, Kuantan Pahang, Singapore. '01
*Marriott, Frederick A., Min. Engr.,
"Roslyn," Summer St., Orange, N. S. W., Australia. '06
**Marriott, Hugh F., Cons. Min. Engr., Central Mining & Investment
Corpn., 1 London Wall Bldgs., London, E. C., England. '05
*Marsh, Harry W., Chem. and Geol., White Horse, Yukon Ter., Canada. '12
*Marsh, Richard, Assayer.....P. O. Box 402, Republic, Wash. '05
*Marsh, Robert, Jr., Supt. of Mines, Braden Copper Co., Rancagua,
Chile, So. Am. '08
†Marshall, Emory M., Student.....McConnell Mine, Mason, Nev. '12
*Marshall, James J., Civ., Min. Engr., Mgr. Gauley Mt. Coal Co.,
Jodie, W. Va. '03
*Marshall, Stewart McC., Asst. Engr., Cambria Steel Co.,
134 Tioga St., Johnstown, Pa. '07
*Marshall, Stuart B., Asst. Genl. Mgr., Dunbar Furnace Co., Dunbar, Pa. '10
*Marston, Philip L., Met..... .....P. O. Box 826, Tonopah, Nev. '08
*Martin, Dr. A. A., Min. Engr., Handelstr. 6, N. W. 23, Berlin, Germany. '00
*Martin, Arthur W.....Casilla 181, Valparaiso, Chile, S. A. '08
*Martin, F. Oskar, Mineral Inspector, General Land Office,
512 U. S. Custom House, San Francisco, Cal. '07
*Martin, James J., Kapsan Mines, Care Dr. R. Grierson, Songchin,
Joshin, Korea. '06
*Martin, Nicholas J., Supt.....Beaver Gold Dredging Co., Loomis, Cal. '00
*Martin, Robert L., Jr., Asst. Genl. Mgr., Bessemer Coke Co.,
704 Oliver Bldg., Pittsburg, Pa. '08
*Martin, Samuel G., Mine Operator, Franco Colorado Mines, Eureka, Colo. '12
*Martinez, Adolfo, Compania Metalurgica Mexicana,
P. O. Box 307, Mexico City, Mexico. '02
*Maschmeyer, H., Director der Usine de désargentation,
Hoboken-les-Anvers, Belgium. '08
*Masias, Manuel G., Cons. Engr., Sociedad de Ingenieros, Lima,
Peru, So. America. '08

*Mason, J. Gordon.....Guamo, Oriente, Cuba. '05
**Mason, Russell T., Min. Engr., Genl. Supt.,
Daly-Judge Mining Co., Park City, Utah. '93
*Massenez, Joseph, Engr.....10 Humboldtstrasse, Wiesbaden, Germany. '91
*Master, Noel M., Met. Engr., Care Osborne & Chappel,
Ipoh, Perak, Federated Malay States. '11
*Masters, Harris K.....Ohio Valley Fluor Spar Co. Marion, Ky. '95
*Masters, John E., Min. Engr.... .....240 W. 5th St., Tucson, Ariz. '07
*Mather, Henry A., Mining and Met.....Instructed to hold all mail. '00
*Mather, Samuel, Merchant.....Western Reserve Bldg., Cleveland, Ohio. '79
*Mather, Thomas W.....Casilla 655, Guayaquil, Ecuador, So. America. '08
*Mather, William G., Prest., Cleveland Cliffs Iron Co.,
Mercantile Bank Bldg., Cleveland, Ohio. '86
*Mathews, Edward J.....1007 Hoge Bldg., Santa Monica, Cal. '97
**Mathewson, E. P., Met., Mgr., Anaconda Copper Mining Co.,
Anaconda, Mont. '89
*Matlack, Elwood V.....515 Bompart Rd., Webster Grove, Mo. '08
*Matsukata, Otohiko, Mng. Director, Nippon Oil Co.,
Kashiwazaki, Echigo, Japan. '11
*Mattes, William F., Cons. Engr., 514 Board of Trade Bldg., Scranton, Pa. '81
*Matthiessen, F. W.....1127 Ninth St., La Salle, Ill. '84
*Mattievich, Emerio, Min. Engr., Mng. Partner, F. A. Mattievich & Co.,
Batum, So. Russia. '12
*Mauney, A. C..... .....610 S. Main St., Salisbury, N. C. '94
*Maurice, Joseph, Min. Engr., Hacienda de Monte Horcaz, por
Villanueva de las Minas, Provincia de Sevilla, Spain. '90
*Maurice, Juan, Min. Engr., Mgr., The Royal Silver Mines of Potosi,
Bolivia, Ltd., Potosi, Bolivia, South America. '00
*Mavor, Sam, Mech., Elec. Engr., 47 Broad St., Mile-end, Glasgow, Scotland. '11
*Maxwell, Frederick A. G., Met., Randfontein Estates Gold Mining Co.,
Randfontein, Transvaal, South Africa. '05
*Maxwell, William, Mill Owner, 10 Kent Bldgs., Adelaide St.,
Brisbane, Queensland, Australia. '04
**May, Albert Edward.....465 Washington St., Brookline, Mass. '02
*May, De Courcy, Prest., New York Shipbuilding Co.....Camden, N. J. '79
**May, Jesse J.....Idaho Springs, Colo. '01
*Mayer, Lucius W., Min. Engr.....71 Broadway, New York, N. Y. '05
*Mayer, Paul H., Chem.....169 N. Fulton Ave., Mt. Vernon, N. Y. '09
*Maynard, Edward W., Chem.....Atlas Powder Co., Senter, Mich. '12
*Maynard, Rea E., Min., Civ. Engr.,
419 So. Commonwealth Ave., Los Angeles, Cal. '94
*Maynard, T. Poole, Min. and Cons. Geol.,
321 James Bldg., Chattanooga, Tenn. '11
*Meacham, Daniel B., Iron Mfr... .....Carew Bldg., Cincinnati, Ohio. '05
*Means, Ellison C., Prest., Gen. Mgr., Low Moor Iron Co., Low Moor, Va. '88
**Means, John H., Min. Engr., 1 London Wall Bldgs., London, E. C., Eng. '97
*Meeks, Reginald V., Met. Engr.,
Sales Dept., Vinton Colliery Co., 1 Broadway, New York, N. Y. '02
*Megraw, Herbert A., Cons. Engr.. Apartado 308, San Luis Potosi, Mex. '01
*Meier, Edward D., Prest. and Chief Engr., Heine Safety Boiler Co.,
11 Broadway, New York, N. Y. '86

*MEIKLEHAM, THOMAS M. R., Mech. and Elec. Engr., 25 Broad St., New York, N. Y. '04
*MEIN, WILLIAM W., Canadian Min. & Exploration Co., Ltd., 43 Exchange Pl., New York, N. Y. '00
*MELLER, HENRY B., Asst. Prof. in Mining, Univ. Pittsburg, Pittsburg, Pa. '10
*MELLISS, D. ERNEST, Cons. Min. and Civ. Engr., P. O. Box V, Mill Valley, Cal. '00
*MELZER, EMIL, Cons. Min. Engr. and Met.....Baker City, Ore. '00
*MEMMINGER, C. G., Cons. Min. Engr., Prest., Peninsula Pebble Phosphate Co., Lakeland, Fla. '92
*MENEFEE, ARTHUR B., Min. Engr., Supt. of Mines, Empire S. & I. Co., Oxford, N. J. '11
*MENTZEL, CHARLES, Min. Engr.....Instructed to hold all mail. '09
*MENZIES, JOSEPH F., Genl. Supt., NW. Improvement Co., Roslyn, Wash. '05
*MERCER, HARRY T., Min. and Civ. Engr.....Painesdale, Mich. '05
*MERCER, JOHN W., Genl. Mgr., South American Development Co., P. O. Box 336, Guayaquil, Ecuador, and 15 Broad St., New York, N. Y. '97
*MERRETT, WILLIAM H., Asst. Prof. of Met., Royal School of Mines, London, "Hatherley," Grosvenor Rd., Wallington, Surrey, England. '12
*MERRICKS, FRANK, Min. Engr., 5 Great Winchester St., London, E. C., Eng. '92
*MERRILL, CHARLES W., Met.....143 Second St., San Francisco, Cal. '92
*MERRILL, EDWARD P.....Care Union Club. Cleveland, Ohio. '01
*MERRILL, F. J. H., Min. Engr., 610 Citizens Bank Bldg., Los Angeles, Cal. '12
*MERRILL, MONROE E., Min. Engr.....Hollywood, Cal. '11
*MERRILL, POMEROY C., Min. Engr., Chief Engr., Longyear Mesaba Land & Iron Co., Aurora, Minn. '10
*MERRIMAN, MANSFIELD, Cons. Civ. Engr., 1071 Madison Ave., New York, N. Y. '05
*MERRY, F. CHARLES, Min. Engr.....Ferguson, B. C., Canada. '08
*MERRY, HENRY G.....956 Rockefeller Bldg., Cleveland, Ohio. '89
†MERRYWEATHER, GEORGE.....Park Lane, Highland Park, Ill. '80
*MESSITER, EDWIN H., Vice-Prest., Electric Weighing Co., 180 13th Ave., New York, N. Y. '01
*MESSLER, EUGENE L., Asst. to Prest., Riter-Conley Mfg. Co., 55 Water St., Pittsburg, Pa. '97
*MESTA, GEORGE, Prest., Mesta Machine Co., 708 Lewis Block, Pittsburg, Pa. '02
*METCALF, FRANK A., Min. Engr.....Last Chance Mine, Wardner, Ida. '12
*METCALFE, GEORGE W., Mammoth Copper Min. Co.....Kennett, Cal. '96
*METZGER, WILLIAM G.....54 E. Division St., Chicago, Ill. '06
*MEYEROVITCH, JOSEPH A., Mgr., International Engrg. & Trading Co. 28 Morskaya, St. Petersburg, Russia. '10
*MEYERS, WILLIAM R., Min. Engr., Cleveland-Cliffs Iron Co., Princeton, Mich. '12
*MIDDLEKAMP, LEROY L., Supt., Ellamar Mining Co.....Ellamar, Alaska. '13
*MILDON, REGINALD B., Civ., Min. Engr., Westinghouse Machine Co., E. Pittsburg, Pa. '05
*MILES, JOHN B., Civ., Mech. Engr.....1011 Chestnut St., Philadelphia, Pa. '06
*MILLARD, FRANK W., Min. Engr.....Ely, Nev. '03
*MILLARD, H. ALFRED, Mgr., Operating Dept., Breitung & Co., Ltd., 11 Pine St., New York, N. Y. '12
*MILLARD, ROBERT P., Min. Engr.....803 Citizens Bldg, Cleveland, Ohio. '12
*MILLARD, WILLIAM J., Prospector, Hartley Hall, Columbia University, New York, N. Y. '12

*Millen, John D., Genl. Mgr., Mt. Bischoff Mine.....Waratah, Tasmania. '05
*Miller, Arthur J., Met., Am. Direct Concentrating Co.,
315 So. 10th East St., Salt Lake City, Utah. '10
*Miller, Benjamin Le R., Prof. Geol., Lehigh Univ., So. Bethlehem, Pa. '11
*Miller, Charles L., Genl. Supt., American Steel & Wire Co.,
828 Frick Bldg., Pittsburg, Pa. '93
*Miller, Charles W., Min. Engr.....Hotchkiss, Colo. '84
*Miller, D. Irving...Care C. W. Hunt Co., W. New Brighton, S. I., N. Y. '02
*Miller, David G., Min. Engr.....1336 Gaylord St., Denver, Colo. '09
*Miller, Emory T., Min. Engr., 414 W. St. Catherine St., Louisville, Ky. '03
*Miller, George L., Min. Engr., Genl. Mgr.,
Kettle Creek Coal Mining Co., Bitumen, Pa. '05
*Miller, Harry H., Cons. Min. Engr...Apartado 95, Guanajuato, Mexico. '95
*Miller, James.....53 Newlands Road, Glasgow, Scotland. '95
*Miller, Jesse W., Min. Engr.....30 W. 44th St., New York, N. Y. '05
*Miller, Joseph, Supt., Long Tunnel Mining Co.,
Walhalla, Vic., Australia. '99
*Miller, Leonard B., Oglebay, Norton & Co., Wade Bldg., Cleveland, Ohio. '93
*Miller, Spencer, Mech. Engr.....96 Liberty St., New York, N. Y. '90
*Miller, W. Clayton, Min. Engr., Genl. Mgr.,
Federal Mining & Smelting Co., Wallace, Idaho. '95
**Miller, Willet G., Provincial Geologist, Bureau of Mines,
Toronto, Canada. '03
*Milliken, John T., Cons. Engr., Golden Cycle Min. Co.,
1615 N. Cascade Ave., Colorado Springs, Colo. '12
*Mills, Charles E., Supt., Detroit Copper Min. Co. of Ariz.....Miami, Ariz. '90
*Mills, Edwin W., Seoul Mining Co., Care Dr. J. H. Wells,
Pyeng Yang, Korea. '04
*Mills, Eugene C., Min. Engr.....Willows, Cal. '01
*Mills, Frank P., Giroux Cons. Mines.....Kimberly, Nev. '83
*Mills, Frank S., Min. Geol.....Province Lake, N. H. '09
*Mills, Kenneth.....1305 10th St., N. W., Washington, D. C. '11
*Mills, Louis D., Met. Engr., Room 502, 143 Second St., San Francisco, Cal. '01
*Mills, Ronald Van Auken, Min. Engr., 21 Union Sq., New York, N. Y. '07
*Milou, Henri, Ingenieur.....Houlgate, Calvados, France. '13
*Miltenberger, George, Surveyor.....3758 W. Pine Blvd., St. Louis, Mo. '06
*Milton, Maxwell C., Min. Engr.....6 Schrader Bldg., Tucson, Ariz. '07
*Minard, Frederick H., Min. Engr.....111 Broadway, New York, N. Y. '97
*Miner, Harlan S., Chem.....Welsbach Light Co., Gloucester City, N. J. '04
*Mingaye, John C. H., Anal. Chem., Dept. Mines, Sydney, N. S. W., Aust. '91
*Minsch, Walter C., Min. Engr.....Hotel Jardin, El Oro, Mex., Mexico. '10
*Miranda, Jaquanharo de, Min. Engr.,
Rua Larangeiras 304, Rio de Janeiro, Brazil, S. A. '05
*Mishler, Ralph T., Min. Engr..... .....Ysabel, Son., Mexico. '12
*Mitchell, Charles T., Met. Engr.....Copper Cliff, Ont., Canada. '06
*Mitchell, Deane P., Min. Engr.,
1 London Wall Bldgs., London, E. C., England. '87
*Mitchell, George, Met.....1467 S. Figueroa St., Los Angeles, Cal. '99
*Mitchell, Henry H., Secy. and Treas.,
The General Crushed Stone Co., Drake Bldg., Easton, Pa. '06
*Mitchell, Pentecost, Genl. Mgr., Oliver Iron Mining Co.,
605 Wolvin Bldg., Duluth, Minn. '97

*Mitchell, Robert, Genl. Sales Agent, Penna. Coal and Coke Co., Land Title Bldg., Philadelphia, Pa. '86
*Mitchell, William S., Banker.....Room 405, 60 State St., Boston, Mass. '07
*Mitchell-Roberts, J. F., Met. Engr., 8 Eliot Hill, Blackheath, London, S. E., England. '99
*Mitinskij, Alexander N.....V. O. 2, line V. 3, St. Petersburg, Russia. '00
*Mitke, Charles A., Chem.....P. O. Box 1226, Dawson, N. M. '10
*Mixer, Charles T., Min. Engr.....Box 56, Salt Lake City, Utah. '97
*Moffat, John, Mng. Dir., Irvinebank Min. Co., Irvinebank, Queensland, Australia. '02
*Moffett, Charles A., Supt. of Machinery, 909 Brown-Marx Bldg., Birmingham, Ala. '09
*Mohr, Louis, Cons. Engr.....349 W. Illinois St., Chicago, Ill. '88
*Mohrman, Edwin M., Min. Engr.....1293 W. 111th St., Cleveland, Ohio. '13
*Moldenke, Richard., Cons. Met.....Watchung, N. J. '98
**Moller, Warden A., Min. Engr., Mining Department, Imperial Railways, Tientsin, China. '06
*Monell, Ambrose, Prest., International Nickel Co., 43 Exchange Place, New York, N. Y. '02
**Montandon, George E., Civ. Engr...Chuquicamata, Chile, So. America. '07
**Montgomery, Alexander, Min. Engr., Geol., State Mining Engr., Dept. of Mines, Perth, Western Australia. '94
*Montgomery, Ernest A., Mine Owner and Mgr., 1106 Los Angeles Investment Bldg., Los Angeles, Cal. '11
*Montis, Enrique de, Min. Engr., Tegucigalpa, via Puerto Cortez, Honduras, Central America. '03
*Moody, Burdett, Civ. and Min. Engr., 1043 San Pasqual St., Pasadena, Cal. '96
*Mooney, James D., Sales Engr.....Leonard Hotel, Butte, Mont. '12
*Moore, Bertie H., Lecturer in Met., School of Mines, Kalgoorlie, Western Australia. '10
*Moore, Charles J., Min. Engr.....741 Equitable Bldg., Denver, Colo. '82
*Moore, Edward W., Min. Engr., Ingersoll-Rand Co., Ferencz Jozsef-Rakpart 17, Budapest, IV., Hungary. '03
*Moore, Everett B., Min. Engr., Chief Engr., West Va. Div., Consolidation Coal Co., Fairmont, W. Va. '10
*Moore, F. Cushing, Min. Engr., State Inspector, Mining Department, Boise, Idaho. '03
*Moore, George.....330 W. 102d St., New York, N. Y. '97
*Moore, Ledlie D., Min. Engr.....Chatham, N. J. '09
*Moore, Marshall G., Min. Engr.....Moorland, Johnstown, Pa. '86
*Moore, Philip N., Cons. Min. Engr. and Geol., 611 Merchants Laclede Bldg., St. Louis, Mo. '74
*Moore, Redick R., Cons. Engr., Suriana M. & S. Co., Apartado 1939, Mexico City, Mexico. '05
*Moore, Robert McI., Chief Engr., Mt. Boppy G. M. Co., Ltd., Boppy Mountain, New So. Wales, Australia. '07
*Moore, Roy W., Min. Engr.....Address wanted. '07
**Moore, Warner, Mining.....Richmond, Va. '05
*Moran, Robert B., Min. Engr.....311 California St., San Francisco, Cal. '08
*More, George A., Min. Engr., Mine Mgr., "Altona," Berry St., North Sydney, Sydney, New South Wales, Australia. '04
*Morgan, Charles G., Cons. Engr.....Roslyn, Wash. '12

*Morgan, George H., Min. Engr., Care F. H. Probert, 314 Central Bldg., Los Angeles, Cal. '12
*Morganroth, Lee C., Min. Engr., 1800 Farmers Bank Bldg., Pittsburg, Pa. '13
*Morley, Frederick H., Min. Engr.....734 Symes Bldg., Denver, Colo. '02
*Morley, Walter S., Asst. Prof. Met., Univ. California, Berkeley, Cal. '02
*Morris, Charles E., Min. Engr., Assayer...Morris & Flint, Pony, Mont. '00
*Morris, Frank G., Genl. Supt. of Coal Mines.....Sayreton, Ala. '10
*Morris, Frank H., Cons. Civ., Min. Engr., 8 Union Court, Old Broad St., London, E. C., England. '00
*Morris, Fred L.....1057 Monadnock Bldg., San Francisco, Cal. '01
**Morris, Harry T., Supt. Armor Dept., Bethlehem Steel Co., Bethlehem, Pa. '06
*Morris, Henry C., Min. Engr., The Wyoming, Columbia Rd., Washington, D. C. '02
††Morris, Rev. Richard J..... .....509 Lincoln Drive, Germantown, Pa. '92
*Morris, Robert H., Min. Engr., Pocahontas, via Edmonton, Alberta, Canada. '05
**Morris, William H., Iron Merchant, Morris, Wheeler & Co., 1608 Market St., Philadelphia, Pa. '81
*Morrison, Harold A., Mine Supt.....Candor, N. C. '12
**Morrison, Thomas.....Diamond Bank Bldg., Pittsburg, Pa. '96
*Morrison, Walter L., Met., Moffat-Irving Electric Smelters, Ltd., 400 Front St., Toronto, Ont., Canada. '10
*Morrison, William J., Mining, Canada Foundry Co., Ltd., So. Porcupine, Ont., Canada. '07
*Morrow, Bayard S., Min. Engr.....P. O. Box 102, Gem, Idaho. '12
*Morrow, John T., Care G. F. Williams, 15 Maiden Lane, New York, N. Y. '03
*Morse, Bradish P., Treas., Morse Bros. Machinery and Supply Co., 1801 Lawrence St., Denver, Col. '06
*Morse, Bryan K.....29 Broadway, New York, N. Y. '06
*Morse, Edward C., Met.....5302 42d Ave., S. E., Portland, Ore '13
*Morse, George H., Min. Engr.....Pocahontas, Alta., Canada. '12
*Morse, Philip S., Mgr., Sulphide Corporation, Ltd., Cockle Creek, New South Wales, Australia. '84
†Morse, Robert G.....Treas., Mass. Steel Casting Co., Everett, Mass. '99
**Morse, Willard S., Am. Smelt. & Refin. Co., 165 Broadway, New York, N. Y. '92
*Morse, Willard V., Engr.....Tacoma Smelting Co., Tacoma, Wash. '05
*Morton, Erle D., Mining.....6001 Eleanor Ave., Los Angeles, Cal. '06
*Morton, Roscoe B., Mine Mgr....Tropic Mining Co., Idaho Springs, Colo. '00
*Moser, George F.. .....Oatman, Ariz. '05
*Moses, Alfred J., Prof. Mineral., Columbia University, New York, N. Y. '04
*Moses, Horace..... Santa Rita, N. M. '01
*Mosier, McHenry, Min. Engr., P. O. Box 35, Nacozari de Garcia, Son., Mexico. '07
**Mosman, P. A., Amer. Smelt. & Refin. Co., 165 Broadway, New York, N. Y. '94
*Moss, Cleveland O., Min. Engr.....936 Union Oil Bldg., Los Angeles, Cal. '05
*Moss, Prof. Milton, Min. Engr.....Huntsville, Ala. '82
*Mostowitsch, Wladimir, Met. Engr., Docent Imperial Technological Institute, Tomsk, Siberia. '11
*Motter, William D. B., Jr., Min. Engr., Mgr. Canada Iron Mines, Ltd., Trenton, Ont., Canada. '07

**Moubray, John M., Min. Engr., 98 Leadenhall St., London, E. C., Eng. '06
*Moulden, John C., Mgr., Central Zinc Co., Ltd., Seaton Carew, Co. Durham, England. '97
*Moule, John W., Met., Great Fitzroy Mine, Mount Chalmers, Queensland, Australia. '01
*Moulthrop, George E., Civ., Min. Engr., 805 W. Silver St., Butte, Mont. '03
*Moxham, Arthur J., Vice-Prest., E. I. du Pont de Nemours Co., du Pont Bldg., Wilmington, Del. '11
*Mudd, Seeley W., Engr. of Mines...1001 Central Bldg., Los Angeles, Cal. '83
*Muir, Thomas K., Min. Engr...Room 404, 57 Post St., San Francisco, Cal. '01
*Munger, Charles H., Mine Mgr., Pickands, Mather & Co., Lonsdale Bldg., Duluth, Minn. '04
*Munro, Charles H., Min. Engr., 1057 Monadnock Bldg., San Francisco, Cal. '99
*Munro, Duncan M., Min. Engr.....Apartado 37, Guanajuato, Mexico. '09
**Munroe, Charles E., Prof. Chem., Columbian Univ., Washington, D. C. '95
*Munroe, Harold S., Min. Engr.....Golden, Colo. '12
*Munroe, Henry S., Prof. of Mining, School of Mines, Columbia University, New York, N. Y. '72
*Munson, Augustus, Mine Supt.....Hibernia, N. J. '05
*Murdoch, Charles R.....343 Bush St., San Francisco, Cal. '02
*Murdoch, James V. B., Min. Engr., Neuck, Larbert, Stirlingshire, Scotland. '04
*Murdoch, John A. W., Min. Engr., Genl. Supt., Morococha Mining Co., Morococha, via Lima, Peru, South America. '06
*Murota, Yoshibumi, Chairman, Board of Directors, Hakkaido Tauko, Kisen Kabushiki Kaisha, Tsukiji, Tokyo, Japan. '11
†Murphy, Edward M., Elect. Engr., Hecla Mining Co.....Burke, Idaho. '12
*Murphy, Francis J., Met., Wks. Mgr., Gt. Cobar, Ltd., Cobar, N. S. W., Australia. '06
*Murphy, Stephen E., Furnace Supt.....Lock Box 68, Mancelona, Mich. '07
*Murray, Charles B., Crowell & Murray, Perry-Payne Bldg., Cleveland, O. '90
**Murray, George, Civ. and Min. Engr...112 W. 80th St., New York, N. Y. '82
*Murray, Henry T., Chem., Ray Cons. Copper Co.....Hayden, Ariz. '04
*Murray, James J., Min. Engr., Orogrande Smelting Co., Orogrande, N. M. '02
*Musgrave, Edward C., Cons. Min. Engr., Bus. Mgr., Canadian Tin Mining Co., Apartado 119 Bis, Mexico City, Mexico. '04
*Musgrave, Robert, Min. Engr., 1206 Government St., Victoria, B. C., Canada. '09
*Myers, Desaix B., Min. Engr.....321 Story Bldg., Los Angeles, Cal. '08
*Myers, James W., Met. Supt., North American Smelting & Mines Co., Golden, Colo. '01
*Myers, Roy V., Civ. and Min. Engr., 603 Empire Bldg., Knoxville, Tenn. '09
*Myrick, Charles M., Min. Engr.....2709 Pine St., San Francisco, Cal. '97

*Nack, Charles, Min. Engr.....Clifton Hotel, Clifton, Ariz. '00
*Naething, Foster S., Min. Engr.....Miami, Ariz. '09
*Nagai, Kiutaro, Min. Engr., Mng. Dir., Japan Sulphur Stock Co., No. 11, Hikawa-cho, Akasakaku, Tokyo, Japan. '07
*Nagel, Frank J., Assayer....Apartado 19, Santa Barbara, Chih., Mexico. '03
*Nagel, Henry P., Jr., Min. Engr., Vindicator Cons. G. M. Co., Independence, Colo. '04

*Nahl, Arthur C., Min. Engr.,
Progreso Mining Co., Triunfo, La Paz, Lower Cal., Mexico. '02
*Naito, Kisahiro, Prest., Nippon Oil Co., Kashiwazaki, Echigo, Japan. '11
*Nakamura, Keijiro, Chief Met., Sumitomo's Smelting Wks.,
Shisaka-Shima, Ochi-Gun, Iyo, Japan. '07
*Nason, Frank L., Geol. and Min. Engr...Lock Box 6, West Haven, Conn. '91
*Nau, John B., Met. Engr.....1 Broadway, New York, N. Y. '02
*Naumann, Dr. Edmund, Tellus Actiengesellschaft für Bergbau
und Hüttenindustrie, Frankfort-on-Main, Germany. '03
*Nawatny, William F., Min. Engr.....Van Buren, Ind. '01
**Neale, Arthur Leggett, Genl. Mgr., Transvaal Gold Mining Estates,
Ltd., Pilgrims Rest, Transvaal, So. Africa. '97
*Neale, James B.....Prest., Buck Run Coal Co., Minersville, Pa. '04
*Nebeker, Aquila C., Min. Engr., Supt., Scranton Mines, Lofgreen, Utah. '09
**Nebeker, William G., Min. Engr.,
35 East 1st North St., Salt Lake City, Utah. '99
*Neel, Carr Baker, Cons. Engr.....14 Wall St., New York, N. Y. '03
*Negus, James, Mine Mgr., Mt. Boppy Gold Mine,
Boppy Mountain, N. S. W., Aust. '09
*Neill, James W.....400 Arroya Terrace, Pasadena, Cal. '79
*Neill, William L., Librarian.....Solvay Process Co., Syracuse, N. Y. '80
*Neilson, William, Min. Engr.....302 Henry Bldg., Portland, Ore. '10
*Neilson, Winthrop C.....1111 Harrison Bldg., Philadelphia, Pa. '06
*Nellis, Dan Henry.....Box 21, Ainsworth, B. C., Canada. '02
*Nelson, D. W. C., Min. and Civ. Engr.....Address wanted. '99
*Nelson, John L., Met. Engr., Yavapai Consolidated Gold-
Silver-Copper Co., Old Tiger Mine, Crown King, Ariz. '06
*Nesbitt, Martin J., Min. and Mech. Engr., Becerra, Nesbitt & Co.,
Urique, Chih., Mexico. '97
*Netter, Albert J., Asst. Inspector of Mines,
Boksburg, Transvaal, So. Africa. '05
*Neustaedter, Arthur.....238 Virginia Ave., Jersey City, N J. '86
*Newbaker, Edward J., Supt., Lehigh & Wilkes-Barre Coal Co.,
53 Butler St., Kingston, Pa. '12
*Newberry, Andrew W., Chem.....321 Story Bldg., Los Angeles, Cal. '09
†Newberry, Roger W., Student Mining, 615 Orange St., New Haven, Conn. '09
*Newbery, J. Wilfred, Min. Engr., Taquah Min. & Exploration Co.,
Ltd., Tarkwa, Gold Coast, West Africa. '09
*Newcomb, Clive S., Mech. and Met. Engr., Edifico "La Mutua," 414,
Ave. 5 de Mayo No. 2, Mexico City, Mexico. '05
*Newell, Fredk. H., Chief Engr., Reclamation Service, Washington, D. C. '05
*Newell, George S., Chem.....Ascarco, Dur., Mexico. '11
*Newhall, Henry B., Jr., Contracting.....90 West St., New York, N. Y. '12
†Newhouse, Samuel, Mining.....P. O. Box 930, Salt Lake City, Utah. '05
*Newland, David H., Geol.....Geological Hall, Albany, N. Y. '05
*Newman, Bruno, Min. Engr., Mgr., "El Tabor y Anexas,"
Apartado 90, Aguascalientes, Mexico. '06
*Newman, Maurice A., Min. Engr., Met.,
839 Mills Bldg., San Francisco, Cal. '01
*Newsom, John F., Assoc. Prof. of Min. and Met...Stanford University, Cal. '95
*Newton, Harry W., Met. Engr.....Republic, Wash. '12

*Newton, Peter A., Asst. Genl. Supt., Illinois Steel Co., So. Chicago, Ill. '10
*Nichol, Thomas, Civ. and Min. Engr., Care McKell Coal & Coke Co., Glen Jean, W. Va. '96
**Nichol, William, Care African Banking Corpor., Kimberley, So. Africa. '03
**Nicholas, Askin M., Mine Mgr., Care C. E. Packer, 31 Queen St., Melbourne, Vic., Australia. '00
*Nicholas, Paul, Mine Mgr.....R. F. D. No. 7, Springfield, Mo. '06
*Nicholls, John C., Min. Engr., Canadian Copper Co., Copper Cliff, Ont., Canada. '06
*Nichols, Harvey B., Met.....7 Orange Ave., E. Oakland, Cal. '02
*Nichols, Henry W., Asst. Curator of Geol., Field Columbian Museum, Chicago, Ill. '00
*Nichols, Horace G.....Mawmead, Ashstead, Surrey, England. '03
*Nichols, J. Clayton, Min. Engr., Genl. Mgr., Negros-Philippine Lumber Co., Cadiz, Negros Island, P. I. '95
**Nichols, Ralph, Genl. Cons. Engr., Latest Out Mine, Gilmore, Lemhi Co., Idaho. '93
*Nichols, William H., Jr., Chairman, Executive Com., General Chemical Co., 25 Broad St., New York, N. Y. '98
*Nicholson, Frank, Cons. Engr.....15 E. 10th St., New York, N. Y. '80
†Nicholson, Samuel T., Prest. and Genl. Mgr., Vulcan Iron Works, Wilkes-Barre, Pa. '11
*Nicoll, Benjamin.....149 Broadway, New York, N. Y. '92
**Nicolson, Robert B., Genl. Mgr. and Atty., Ivanhoe Gold Corporation, Ltd., Boulder, Western Australia. '02
*Nieding, Burton B., Min. Engr...Kensington Mining Co., Juneau, Alaska. '06
*Nighman, Clare E., Mine Supt....Kerr Lake Mining Co., Ltd., Cobalt, Ont., Canada. '11
*Nishimura, Kojiro, Min. Engr., Miike Mine, Ohmuta, Chikugo, Fukuoaka, Japan. '11
*Nishio, Keijiro, Mine Inspector, 7 Konya St., Shidzuoka, Suruga, Japan. '00
*Nissen, Peter N., Engr.....Head, Wrightson & Co., 5 Victoria St., Westminster, London, England. '03
*Noble, Albert E.....20th St. and Wilmer Ave., Anniston, Ala. '90
*Noble, Louis S., Min. Engr.....930 Equitable Bldg., Denver, Colo. '89
*Nobs, Frederick W., Min. Engr...La Leonesa, Matagalpa, Nicaragua, C. A. '06
*Nold, Frederick B., Min. Engr., Republic Iron & Steel Co., Republic, Pa. '08
*Noon, Edward E.....Nogales, Ariz. '97
*Noon, Thomas F.....Genl. Mgr., Illinois Zinc Co., Peru, Ill. '01
*Norman, John E., Min. Engr..... 302 Mining Exchange, Denver, Colo. '99
*Norrie, William G., Care A. G. Larson, 809 Bower Bldg., Vancouver, B. C., Canada. '08
*Norris, R. Van A., Cons. Engr., Second Nat. Bank Bldg., Wilkes-Barre, Pa. '85
*North, Wheeler O., Min. Engr., Geol., 303 Henne Bldg., Los Angeles, Cal. '05
*Norton, Benjamin N., Cons. Min. and Civ. Engr., Tomlinson & Norton, Douglas, Ariz. '04
*Norton, Edward G.....212 Milam St., Shreveport, La. '07
**Norton, R. H., Min. Engr.....335 W. 27th St., Los Angeles, Cal. '98
*Norwood, Charles J., Min. Engr., Geol., State University, Lexington, Ky. '03
*Notman, Arthur, Min. Geol.....P. O. Box 1062, Bisbee, Ariz. '12
*Novoa, Bartolomé, Min. and Met. Engr., Apartado 12, Cerro de Pasco, Peru, So. America. '08

**Noyes, Henry, Engr.....17 Queen St., Melbourne, Victoria, Australia. '99
*Noyes, William S., Min. Engr.....819 Mills Bldg., San Francisco, Cal. '84
*Nutter, Edward H., Min. Engr., Merchants Exchange Bldg., San Francisco, Cal. '08
*Nye, Robert, Min. Engr.....Grass Valley, Cal. '98

*Oakes, Francis J., Jr., Min. Engr., Secy., Oakes Mfg. Co., 141 Milk St., Boston, Mass. '98
*Oberg, Anton C., Asst. Chief Min. Engr., Arthur Iron Mining Co., Hibbing, Minn. '12
*Oberly, Albert D., Property Engr., H. C. Frick Coke Co., Scottdale, Pa. '09
*O'Brien, Thomas H., Genl. Mgr., Stag Cañon Fuel Co.....Dawson, N. M. '05
*O'Connor, Edward S., Supt of Mines, Northwestern Iron Co., Mayville, Wis. '12
**Oddie, Tasker L., Governor.....Carson City, Nev. '02
*Of, Charles.....Palisade, N. J. '97
*Oglebay, Earl W., Iron Mfr.....38 Wade Bldg., Cleveland, Ohio. '80
*O'Harra, Cleophas C., Prof. of Min. and Geol., So. Dakota School of Mines, Rapid City, S. D. '03
**Olcott, Eben E., Cons. Min. Engr.....36 Wall St., New York, N. Y. '74
*Olcott, William J., Genl. Mgr., Oliver Iron Mining Co.....Duluth, Minn. '87
*Oldfield, Frank W., Min. Engr., Mexican Mines Co., Bolaños, Jal., via Zacatecas, Mexico. '03
**Oliver, Edwin L., Met.....503 Market St., San Francisco, Cal. '02
*Oliver, Lewis, Jr., Assayer, Arthur Plant, Utah Copper Co., Garfield, Utah. '07
*Oliver, Robert S.....P. O. Box 328, Anaconda, Mont. '05
*Olyntho dos Santos Pires, Antonio, Prof. Mining, 150 Rua Marquez de Abrantes, Rio de Janeiro, Brazil, South America. '05
*Opie, Nicholas, Min. Engr., "Marrabinga," Azalea St., Prospect, So. Australia. '11
*Orbison, Thomas W., Hydraulic Engr.....Appleton, Wis. '11
*Ord, William D., Genl. Mgr., Empire Coal & Coke Co., Landgraff, W. Va. '88
*Ordoñez, Ezequiel, Min. Geol. and Engr., 2a General Prim 43, Mexico City, Mexico. '00
*Orford, Ernest V., Mine Mgr.....De Lamar, Idaho. '02
*Ormrod, George, Mgr. and Treas.....Donaldson Iron Co., Emaus, Pa. '81
*Ormrod, John D., Mech. Engr.....Emaus, Pa. '89
*Ormsbee, James J., Supt.....El Paso Smelting Works, El Paso, Texas. '87
*Orr, Charles T., Genl. Mgr., Providence Min. & Mill. Co., Webb City, Mo. '03
*Orr, John, Prof. of Engrg., Transvaal University College, P. O. Box 1176, Johannesburg, Transvaal, So. Africa. '10
*Orr, John F., Eastern Mgr., Chalmers & Williams, Inc., 149 Broadway, New York, N. Y. '12
*Orrok, George A., Mech. Engr., New York Edison Co., New York, N. Y. '07
*Osborn, Abner A., Chem.....Carbon Iron & Steel Co., Parryville, Pa. '09
†Osborn, Howard H., Mine Accountant, 9 St. Stephens Gardens, Twickenham, Middlesex, England. '03
*Osborn, Philip B., Tech. Staff, General Mining & Finance Corpn., Box 1242, Johannesburg, Transvaal, So. Africa. '10
*Osborne, Charles G., Met., Illinois Steel Co., South Wks., South Chicago, Ill. '10
**Osborne, Francis D., Min. and Cons. Engr., "The Grove," Balrath, Co. Meath, Ireland. '00

††Osgood, John C., Retired.....Redstone, Colo. '05
*Osgood, Samuel W.....Jolley Mine, Rural Route, New Market, Tenn. '00
**Oshima, Rokuro.....121 Yoyogi Toyotamagun, Tokyo, Japan. '97
*Osmont, Vance C., Min. Engr., Daniels & Osmont,
517 Monadnock Bldg., San Francisco, Cal. '07
*Oster, William T.....Bonanza, Idaho. '07
*Ostrander, J. E., Prof. of Civil Engineering and Mathematics,
Massachusetts Agricultural College, Amherst, Mass. '94
*Oswald, William, Genl. Mgr., Rombach Iron & Steel Co.,
Rheinzollstrasse 6, Coblentz, Germany. '99
**Otagawa, Masayuki, Civ., Min. Engr.,
Genl. Mgr., Ashio Copper Mines, Shimotsuke, Japan. '04
*O'Toole, Edward.....Genl. Supt., U. S. Coal & Coke Co., Gary, W. Va. '95
*Otterson, George W., Hyd. Min. Engr., 1421 E. 45th Street,
Seattle, Wash. '08
*Ough, Sidney W., Met., Cia. Mararillas y Anexas, Apartado 21,
Pachuca, Hid., Mexico. '07
*Overpeck, A. C., Supt., Continental Copper Mining & Smelting Co.,
Dakota Calumet Camp, Hill City, S. D. '02
*Owens, William D., Div. Supt., Lehigh Valley Coal Co.,
239 Philadelphia Ave., Pittston, Pa. '08
*Oxnam, Thomas H., Min. Engr.....2211 Cambridge St., Los Angeles, Cal. '91

*Packard, George A., Min. Engr., Met....Silver Bow Block, Butte, Mont. '92
*Paddack, Lewis E., Min. Engr.....1815½ E. 2d St., Duluth, Minn. '05
*Page, Edwin R., Civ., Min. Engr.....Jodie, W. Va. '12
*Page, George S., Min. Engr., Asst. Mgr., Park Works,
Crucible Steel Co. of America, Pittsburg, Pa. '86
*Page, Walter T., Mgr., Omaha Plant, Am. Smelt. & Refin. Co., Omaha, Neb. '82
*Page, William N., Civ. and Min. Engr., Prest.,
Gauley Mt. Coal Co., Ansted, W. Va. '80
*Pagliuchi, Frank D., 1144 Title Insurance Bldg.....Los Angeles, Cal. '01
*Paine, Francis W.....409 Commonwealth Ave., Boston, Mass. '12
*Paine, William A., Prest., Copper Range Consolidated Co.,
82 Devonshire St., Boston, Mass. '06
*Painter, Robert K.....Care Mrs. A. V. Schenck, New Brunswick, N. J. '97
*Palacios, José G.....1a Calle del Coliseo No. 2, Durango, Mexico. '98
*Pallister, Hugh D., Instructor in Met., Pa. State College,
State College, Pa. '10
*Palmer, Charles H., Jr., Min. Engr., 250 W. 40th Pl., Los Angeles, Cal. '12
*Palmer, Cortlandt E., Min. Engr.....2 Rector St., New York, N. Y. '89
*Palmer, Irving A., Met.....U. S. Smelting Co., Midvale, Utah. '11
*Palmer, Robert E., Chief Min. Engr., Rio Tinto Co.,
Rio Tinto Mines, Prov. of Huelva, Spain. '00
*Palmer, Thomas H., Genl. Mgr., Broken Hill Junction
North Silver Mine Co., Broken Hill, New South Wales, Australia. '99
*Palmer, William J. A., Mill Supt.,
P. O. Box 11, Concepcion del Oro, Mexico. '04
*Palsgrove, Harry G., Min. Engr., La Dura Mill & Mining Co.,
La Dura, Son., Mexico. '08
*Pardee, I. P., Min. Engr.....Prest., Hazleton Iron Works, Hazleton, Pa. '73
*Park, Mungo, Min. Engr.....Rawang, Selangor, Federated Malay States. '02

*Park, Walter E.....P. O. Box 1562, Cape Town, So. Africa. '92
*Parke, William G.....Vice-Prest., People's Coal Co., Scranton, Pa. '91
*Parker, Charles F., Mining.....Apartado 208, Durango, Mexico. '03
*Parker, Edward W., Statistician, U. S. Geol. Survey, Washington, D. C. '90
*Parker, J. L., Min. Engr.....523 Pacific Bldg., Vancouver, B. C., Can. '97
*Parker, Joseph E., Care Rhodesia Exploration & Development Co.,
P. O. Box 213, Bulawayo, Rhodesia, South Africa. '05
*Parker, Morris B., Min. Engr.....P. O. Box 52, El Paso, Texas. '09
*Parker, Richard A., Cons. Min. Engr., 929 Foster Bldg., Denver, Colo. '82
*Parks, Henry M., Dir., State Bureau of Mines.....Corvallis, Ore. '08
*Parnall, S. A.....1807 Manhattan Pl., Los Angeles, Cal. '90
*Parrish, Karl C., Min. Engr.....1822 Ingersol Ave., Des Moines, Iowa. '09
*Parrish, Robert L., Prest., Oriskany Ore & Iron Co.....Covington, Va. '10
*Parrish, Samuel F., Min. Engr.....Union Trust Bldg., Los Angeles, Cal. '97
*Parrock, H. P., Engr., Lumen Bearing Co.....Buffalo, N. Y. '12
*Parry, Charles F., Mine Captain, The Sub-Nigel, Ltd., Box 50,
Nigel, Transvaal, So. Africa. '11
*Parsons, Arthur R., Supt. Mills, Tonopah Mining Co.....Tonopah, Nev. '06
*Parsons, B. H., Mech. Engr., Mississippi River Power Co., Keokuk, Iowa. '13
*Parsons, Cyril E., Min. Engr.....Box 94, Salisbury, Rhodesia, So. Africa. '06
*Parsons, Lewis A., Min. Engr., Dome Mines Co., Ltd.,
So. Porcupine, Ont., Canada. '08
*Parsons, Roscoe R. S., Genl. Supt., St. Joseph Lead Co., Bonne Terre, Mo. '12
*Passow, Frederick M., Min. Engr., The Eustis Mining Co.,
Eustis, Que., Canada. '02
*Patch, Maurice B., Supt., Buffalo Smelting Works,
1 Austin St., Buffalo, N. Y. '83
*Paterson, Arthur W., Prest. & Gen. Mgr., Am. Mines Co., Lewiston, Idaho. '12
*Paterson, George A.....Oorgaum, Mysore State, South India. '01
*Patrick, William B., Min. Engr.....P. O. Box 32, Millers, Nev. '09
*Pattberg, Otto F., Min. Engr., St. Lawrence Pyrites Co., De Kalb Jc., N.Y. '00
*Patterson, Benjamin G., Min. Engr., Mt. Morgan, Queensland, Australia. '09
*Patterson, Henry H.....Newark, Cal. '08
*Patterson, G. S., Civ. and Min. Engr.....Vivian, W. Va. '88
*Patterson, Peter C., Mech. Engr., National Tube Co.,
554 Frick Bldg. Annex, Pittsburg, Pa. '06
*Patterson, Richard C., Jr., Min. Engr., Beta Theta Pi Club,
1 Gramercy Park, New York, N. Y. '13
*Patterson, Seely B., Asst. Supt., Spanish-American Iron Co.,
Felton, Cuba. '88
*Patterson, Seeley B., Jr., Min. Engr.....P. O. Box 713, Douglas, Ariz. '12
*Paul, Frederick P., Met. Engr., "Danmark," Point Piper, Sydney,
N. S. W., Australia, '03
†Pauly, Karl A., Elec. Engr., General Electric Co....Schenectady, N. Y. '08
*Paymal, George W., Min. and Met. Engr.,
1621 Vallejo St., San Francisco, Cal. '04
*Payne, Arthur C., Genl. Mgr., The Oil Fields of Mexico Co.,
Apartado 38, Tuxpam, V. C., Mexico. '91
*Payne, C. Q., Min. Engr..... .....82 Beaver St., New York, N. Y. '81
*Paz-Soldan, Francisco A., Civ. and Min. Engr.,
Miraflores-Alameda 27, Lima, Peru, So. America. '08
*Peale, Rembrandt, Coal Operator.....70 E. 45th St., New York, N. Y. '11
*Pearce, Frank E., Mgr., Inland Mining Co., Ltd., Paulson, B. C., Canada. '00

**PEARCE, RICHARD,.....6 Beach Lawn, Waterloo, Liverpool, England. '74
†PEARCE, SAMUEL L., Min. Engr.....Sierra Madre Club, Los Angeles, Cal. '12
*PEARCE, WILLIAM C. W., Min. and Met. Engr., Mgr., Hadleigh Castle Mine, Lancelot, via Herberton, North Queensland, Australia. '06
**PEARSE, ARTHUR L., Cons. Civ. and Min. Engr., Worcester House, Walbrook, London, E. C., England. '90
**PEARSE, JOHN B.....317 Walnut Ave., Roxbury, Mass. '72
*PEARSON, FRED. S., Cons. Engr., 17th Floor, 115 Broadway, New York, N. Y. '96
**PEARSON, JOHN E., Min. Engr.....118 Princes Road, Liverpool, England. '82
*PEARSON, WILLIAM R., Min. Engr.....Instructed to hold all mail. '05
*PEASE, F. N.....Box 503, Altoona, Pa. '82
*PEATTIE, CLARENCE G., Min. Engr., Empire Steel & Iron Co., Oxford, N. J. '12
*PECHIN, EDMUND C., Retired.....Buchanan, Va. '71
*PECK, FRANCIS J., Min. Engr., Chem. and Assayer, F. J. Peck & Co., 731–5 Williamson Bldg., Cleveland, Ohio. '07
*PECK, WALTER R., Civ. and Min. Engr.....Big Stone Gap, Va. '11
*PECKITT, LEONARD.....Prest., Empire Steel & Iron Co., Catasauqua, Pa. '83
*PECKITT, MARMADUKE, Supt. of Mines.....R. F. D., Wharton, N. J. '09
*PEDRAZZINI, JOHN, Mining.....Locarno, Switzerland. '01
*PEELE, ROBERT, Prof. of Mining, School of Mines, Columbia University, New York, N. Y. '83
*PEIRCE, WILLIAM H., Vice-Prest., Baltimore Copper Smelting & Rolling Co., P. O. Sta. J., Baltimore, Md. '94
*PELTON, ROGER T., Engr.....Care Copper Queen Mine, Bisbee, Ariz. '04
*PENBERTHY, JOHN E., Min. Engr.....Leonard Copper Co., Gleeson, Ariz. '09
*PENDLETON, JOSEPH S., Asst. to Mgr., Carpenter Steel Co., Reading, Pa. '02
*PENHALLEGON, WILLIAM J., Genl. Supt., Ore Mine, Republic I. & S. Co., Birmingham, Ala. '10
*PENNOCK, J. D., Chem.....Solvay Process Co., Syracuse, N. Y. '89
**PENROSE, R. A. F., JR., Min. Engr. and Geol., 460 Bullitt Bldg., Philadelphia, Pa. '89
*PENTLAND, WALTER J., Mgr., Amajac Mines Co., Hostotipaquillo, Jal., Mexico. '01
*PEREZ, RICHARD A., Assayer, Anal. Chem., 120 N. Main St., Los Angeles, Cal. '00
*PERIN, CHARLES P., Cons. Engr., Prest., Embree Iron Co., 2 Rector St., New York, N. Y. '90
*PERKINS, EDWIN T., Min. Engr., and Ore Buyer.....Granby, Mo. '10
**PERKINS, HENRY C., Min. Engr., Smith & Perkins, 15 Broad St., New York, N. Y. '81
*PERKINS, WALTER G., Met. Engr., 62 London Wall, London, E. C., Eng. '01
*PERRY, JOHN G., Chief Engr., and Genl. Supt., Oak Hills Coal Co., Gas and Electric Bldg., Denver, Colo. '09
*PERRY, ORVILLE C., Mine Mgr., Indian Gold Dredging & Mining Co., Oroville, Cal. '03
*PERRY, OSCAR B., Min. Engr., Genl. Mgr., Yukon Gold Co., 165 Broadway, New York, N. Y. '01
**PERRY, ROBERT S.....3600 Stokley St., Philadelphia, Pa. '95
*PERRY, W. A.....7 East 56th St., New York, N. Y. '83
*PERRY, WILLIAM C., Min. Engr., Davis Coal & Coke Co., Cumberland, Md. '12
*PESCHEL, WILLIAM M., Met., Mederloessnitz C. Koernerweg 6, Dresden, Germany. '09

**Peters, Edward D., Prof. of Met., Harvard Univ., 38 Percival St., Dorchester, Mass. '72
*Peters, Richard.....Morris Bldg., Philadelphia, Pa. '84
*Peters, Richard, Jr.....1101 Spruce St., Philadelphia, Pa. '02
*Peterson, Axel M., Mining.....810 Peach St., Erie, Pa. '13
*Peterson, Frank.....Address wanted. '06
*Petersson, G. Walfrid, Prof. Min., Engelbrecktsgatan 43B, Stockholm, Sweden. '05
*Pettebone, Edgar R., Chief Min. Engr., Coal Dept., Delaware & Hudson Co., Scranton, Pa. '11
*Pettit, Arthur E., Min. Engr.....Oatlands Park, Waybridge, England. '98
*Pfeiffer, George W., Civ. Engr., Genl. Supt., Spanish American Iron Co., Santiago de Cuba, Cuba. '97
*Pfordte, Otto F., Min. Engr.....Cairo, Greene Co., N. Y. '89
*Phalen, William C., Geol., U. S. Geological Survey...Washington, D. C. '12
*Phillips, Francis C., Prof. Chem., University of Pittsburg, Pittsburg, Pa. '94
**Phillips, Joseph L., Civ. Engr., 2159 West 25th St., Los Angeles, Cal. '01
*Phillips, Louis, Min. Engr., Care John Moore & Co., Rua de Candelaria 8, Rio de Janeiro, Brazil, So. America. '07
*Phillips, Walter I., Min. Engr., Met.....Hurley, N. M. '10
*Phillips, William B., Min. Engr. and Met., Dir. Bureau of Econ. Geol., Univ. of Texas, Austin, Tex. '87
*Phœnix, Charles E., Civ. Engr., U. S. Deputy Mineral Surveyor, White House Hotel, Bellingham, Wash. '10
*Picard, Hugh K.....44 London Wall, London, E. C., England. '08
*Pier, Harry M., Met.....98 Hillside Ave., Newark, N. J. '13
*Pierce, James B., Genl. Mgr. of Sharpsville Furnace Co...Sharpsville, Pa. '86
*Pierce, Talbot E.....Care Semet-Solvay Co., Cleveland, Ohio. '05
*Pill, John R., Mine Mgr., Corona Coal & Iron Co.....Corona, Ala. '06
†Pilling, William S., Pilling & Crane, R. E. Trust Bldg., Philadelphia, Pa. '91
*Pinchot, Gifford.....1615 Rhode Island Ave., Washington, D. C. '98
*Pinkham, W. F., Cons. Min. Engr.....Battle Mountain, Nev. '82
†Piper, John S., Master Mechanic, Indian Refining Co., Lawrenceville, Ill. '10
*Pitkin, Lucius, Anal. and Cons. Chem.....47 Fulton St., New York, N. Y. '94
*Pitkin, Stephen H., First Vice-Prest., The Wellman-Seaver-Morgan Co., 682 West Market St., Akron, Ohio. '87
*Pitman, Stephen M., Secy., Narragansett Mutual Fire Insurance Co., 721 Banigan Bldg., Providence, R. I. '73
*Plate, H. Robinson, Min. Engr.....14 Wall St., New York, N. Y. '10
**Plater, John E., Banker.....707 West 28th St., Los Angeles, Cal. '73
*Platt, Edwin H.....730 Symes Bldg., Denver, Colo. '02
*Platt, Frank E., Civ. Engr., Asst. Treas., Scranton Coal Co., Board of Trade Bldg., Scranton, Pa. '81
*Platt, Frederick J., Elec. Engr.....625 Cornell Bldg., Scranton, Pa. '06
*Playter, Clarence C., Mine Supt.....Joplin, Mo. '05
*Playter, Franklin, Treas. and Genl. Mgr., United Zinc Cos., 205 Hemenway St., Boston, Mass. '03
*Playter, George H., Treas. and Genl. Mgr., United Zinc Cos., Joplin, Mo. '05
*Playter, Joseph H., Min. Engr.....Golconda, Nev. '11
*Plock, Albert F.....3506 Fifth Ave., Pittsburg, Pa. '10
**Pluemer, Adolph.....589 Westminster Ave., Elizabeth, N. J. '81
*Plumb, Carlton H., Civ., Min. Engr.....Keystone Bldg., Joplin, Mo. '04
*Poage, Josiah G., Met., Broken Hill Proprietary Co., Port Pirie, So. Aust. '92

*Pocock, Cecil W., Min. Engr., Mgr., Santa Clara Mines, Morococha, Peru, So. America. '07
*Poillon, Howard A., Min. Engr., Poillon & Poirier, 25 Broad St., New York, N. Y. '07
*Polhemus, James H., Cons. Engr., Am. Zinc, Lead & Smelting Co., Carterville, Mo. '10
*Polkinhorn, Edwin J., Assayer, Chem., Prest., Genl. Mgr., Zacatecas Metal Co., Apartado Postal No. 12, Torreon, Coahuila, Mexico. '04
*Polkinghorne, John, Inspector of Mines, Box 58, Cobar, N. S. W., Aust. '05
*Polledo, Y., Genl. Mgr.....Manzaneda 16, Matanzas, Cuba. '89
*Pollen, Clement H., Mine Mgr.....Cranbrook, B. C., Canada. '02
**Pollok, James H.....6 St. James Terrace, Clonskea, Dublin, Ireland. '93
*Pomeroy, Horace G., Min. Engr., Genl. Mgr., Black Mountain Mining Co., Magdalena, Sonora, Mexico. '03
*Pomeroy, William A., Min. Engr., Care New Jersey Zinc Co., 55 Wall St., New York, N. Y. '03
*Pomeroy, William E., Supt. Cia. de Minas de Mexico, Tonichi, Son., Mexico. '03
*Poole, William, School of Mines.....Ballarat, Vic., Australia. '03
*Pope, Frederick J., Min. Geol., De Lamar Mines, 60 Centre Ave., New Rochelle, N. Y. '99
*Pope, J. D., Min. Engr.....P. O. Box 557, Butte, Mont. '91
*Porter, H. Hobart, Cons. Engr.....52 William St., New York, N. Y. '86
*Porter, James McD., Cons. Min. Engr., A. D. Jones Bldg., Spokane, Wash. '00
*Porter, Jesse C., Min. Engr., Abangarez Gold Field, Abangarez, Costa Rica, C. A. '09
*Porter, John A., Min. Engr .....Denver Club, Denver, Colo. '74
*Porter, John B., Prof. Mining.....McGill University, Montreal, Canada. '83
*Porter, John J., Cons. Met. Engr.....P. O. Box 664, Staunton, Va. '04
*Porter, Robert S., Civ. Engr. and Surveyor, Dept. of Construction and Engrg., Isthmian Canal Com., Gatun, Canal Zone. '08
*Porter, William H., Prest., Chemical National Bank, 270 Broadway, New York, N. Y. '99
*Portugal, Joseph H., Min. Engr.....Keeler, Cal. '12
*Posada, Juan de la Cruz, Min. Engr., Medellin, Antioquia, Colombia, S. A. '04
*Posada, Julio, Min. Engr., Calle de Ojinaga No. 21, Chihuahua, Mexico. '06
*Postlethwaite, Robert H., Designer and Supt. Construction of Gold Dredges, Risdon Iron Works, San Francisco, Cal. '01
*Pott, John N., Chief Min. Engr., NW. Improvement Co., Tacoma, Wash. '05
†Potter, Charles F., Attorney, 734 Title Insurance Bldg., Los Angeles, Cal. '06
*Potter, Edward C.....4334 Drexel Blvd., Chicago, Ill. '79
*Potter, Prof. William B., Min. Engr. and Met., Mgr., St. Louis Sampling and Testing Works, 713 Clark St., St. Louis, Mo. '71
*Potter, William C., Min. Engr.....28 Nassau St., New York, N. Y. '97
*Potts, George E., Vice-Prest. and Genl. Mgr. Potts Powder Co., 200 Fifth Ave., New York, N. Y. '88
*Potts, George H., Prest., Potts Bros. Iron Co., Ltd.....Pottstown, Pa. '88
*Potts, William M., Civ. Engr., Mgr., Isabella Furnace.....Wyebrooke, Pa. '86
Pourcel, Alexandre, Ingénieur Civil des Mines, 2 Square du Roule, Paris, France.
*Powel, DeVeaux, Agent, Sterling Coal Co., 29 Broadway, New York, N. Y. '84
*Powel, Godwin H., Penrallt, Trewartha Pk., Weston-Super-Mare, England. '97

*Powell, Frederick, Cons. Engr.,
Seattle Const. & Dry Dock Co., Seattle, Wash. '95
*Powell, John W., Mine Mgr., Supt., Box 106, Coleman, Alberta, Canada. '08
*Powell, Louis W.....914 Central Bldg., Los Angeles, Cal. '00
**Power, Frederick D., Min. Engr. and Met., National Mutual
Chambers, Pitt and Bond Sts., Sydney, New South Wales, Australia. '91
*Power, Harold T., Min. Engr.....East Auburn, Cal. '97
*Pratt, Joseph Hyde, State Geologist.....Chapel Hill, N. C. '97
*Pratt, Paul D., Min. Engr.....Libby, Mont. '12
*Pratt, Wallace E., Geol.....Division of Mines, Manila, P. I. '13
*Prentice, Russell, Min. Engr...P. O. Box 1595, Vancouver, B. C., Can. '06
*Prentis, Edmund A., Jr., Min. Engr...408 W. 23d St., New York, N. Y. '07
*Preston, Veryl, Prest., Eastern Steel Co., 60 Broadway, New York, N. Y. '12
*Preusse, Carl M. E., Min. Engr., Forest Strasse 2 p,
Leipzig, Plagwitz, Germany. '05
*Price, Harry B., Genl. Mgr., Montezuma Mines,
Montezuma, Costa Rica, C. A. '06
*Prichard, William A., Min. Engr., Met., Care Bank of Palo Alto,
Palo Alto, Cal. '98
*Prickett, William C., Min., Mech. Engr.,
1212 N. 12th Ave., Birmingham, Ala. '12
†Prince, Ernest, Student, Min. Engrg.....1841 Athen St., Boulder, Colo. '11
*Pringle, Charles A., Min. Engr., Chihuahua Foreign Club,
Chihuahua, Mex. '07
*Pringle, Robert W., Min. Engr.,
Care R. W. Jameson, The Club, Bulawayo, Rhodesia, So. Africa. '02
*Pritchard, DeVilliers G., Min. Engr., Box 135, Cape Town, So. Africa. '08
*Pritchard, William T. M., Chief Assayer and Reduction Officer,
Mysore Gold Mining Co., Ltd., Marikuppam, Mysore, India. '00
*Pritchett, C. W., Jr., Min. Engr.....Steamboat Springs, Colo. '86
*Probert, Frank H., Cons. Engr., Min. Geol.,
314 Central Bldg., Los Angeles, Cal. '00
*Prömmel, Harold W. C., Mine Foreman,
1a Calle Madrid No. 15, Mexico City, Mexico. '12
*Proske, Theodore H., Mech. Engr.....P. O. Box 1443, Denver, Colo. '10
*Prosser, Herman A., Cons. Met. Engr., Prosser & Walker,
165 Broadway, New York, N. Y. '97
**Proust, René, Min. Engr.....Quala Lumpur, Federated Malay States. '05
*Prout, John W., Jr., Min. Engr., Met., 2511 W. 32d Ave., Denver, Colo. '04
*Prout, William M., Min. Engr.,
Claremont Rd., Redruth, Cornwall, England. '03
*Provis, Richard.....14 Penventon Terrace, Redruth, Cornwall, England. '91
*Pryor, James, Min. Engr., Wallaroo Mines.....Wallaroo, So. Aust. '08
*Puckette, Stephen E., Civ., Min. Engr., Black Mountain Coal Land Co.,
Bristol, Tenn. '08
*Pullon, Joseph T., Civ. and Min. Engr., Rowangarth, 75 Victoria Road,
North Park Road, Roundhay, Leeds, England. '91
*Pulsifer, Harrie B., Min. Engr.,
Armour Institute of Technology, Chicago, Ill. '06
*Pultz, John Leggett, Min. Engr.....131 E. 66th St., New York, N. Y. '02
*Purdue, Albert H., State Geol., State Geological Survey, Nashville, Tenn. '97
*Purdy, Henry T., Elec. and Mech. Engr., Purdy Engrg. Co.,
Apartado 750, San José, Costa Rica, C. A. '06

*Putnam, Benjamin R., Assayer.....651 Howard St., San Francisco, Cal. '97
*Putnam, Dana G., Min. Engr.....R. F. D. 1, Fallon, Nev. '06
*Pyne, Francis R., Met. Chem.....525 Westminster Ave., Elizabeth, N. J. '08

*Quarrie, Bertram D., Min. Engr.,
Genl. Supt., Newburgh Steel Wks. & Furnaces, Cleveland, Ohio. '08
*Quarrier, Keith D., Electrician...508 Kanawha St., Charleston, W. Va. '01
*Queneau, A. L. J., Met. Engr., Wetherill Finished Castings Co.,
Erie Ave., East of Richmond St., Philadelphia, Pa. '02
†Quier, Edwin A., Secy., Reading Fire Brick Works, 4th and Canal Sts.,
Reading, Pa. '92
*Quin, Robert A., Mgr. Coal Cos.....16 W. River St., Wilkes-Barre, Pa. '11

*Radcliffe, Alfred, Met.....Copiapo, Chile, So. Am. '11
*Rader, Charles I.....Builders Exchange, San Diego, Cal. '75
†Radford, William H., Min. Engr.....2360 Broadway, San Francisco, Cal. '76
*Ragaz, Ivan, Min. Engr.....Andeer, Grison, Switzerland '02
*Raht, August, Cons. Met.....P. O. Box 397, Santa Cruz, Cal '86
†Raine, James M., Supt. of Construction, Sewell Valley R. R. Co.,
Meadow Creek, W. Va. '08
*Rainsford, Ralph S., Min. Engr.....Jackson, Amador Co., Cal. '03
*Rakowsky, Victor, Min. Engr., Zeno Iron Co.,
Sellwood Bldg., Duluth, Minn. '05
*Raleigh, Joseph R., Branch Mgr., Irvinebank Mining Co.,
Irvinebank, Queensland, Australia. '05
*Ralph, Edward W., Mine Supt., Care Boston-Ely Min. Co., Kimberly, Nev. '10
*Ralston, John C., Cons. Engr....2421 W. Mission Ave., Spokane, Wash. '98
*Ralston, William C., Cons. Min. Engr.,
905 Royal Insurance Bldg., San Francisco, Cal. '90
*Rambo, William C. J., Min. Engr., Rambo-Bignell Engrg. Co..
923 First Natl. Bank Bldg., Denver, Colo. '10
*Ramsay, Erskine, Vice-Prest., Pratt Consolidated Coal Co.,
Brown-Marx Bldg., Birmingham, Ala. '88
*Ramsay, William, Mgr.....Wharton Coal & Coke Co., Coral, Pa. '08
*Rand, Charles F., Prest.,
Spanish-American Iron Co., 71 Broadway, New York, N. Y. '97
*Randall, Charles A., Min., Met. Engr., Nipissing Mining Co., Ltd.,
Cobalt, Ont., Canada. '12
*Randall, David V., Supt.....Lytle Coal Co., Minersville, Pa. '11
*Randolph, Beverley S., Civ. and Min. Engr...Berkeley Springs, W. Va. '91
*Randolph, Edward, Smelting..... .....79 Passaic Ave., Newark, N. J. '02
*Ransome, Frederick L., Econ. Geol., U. S. Geol. Surv., Washington, D. C. '01
*Rash, Frank D., Min. Engr.....Earlington, Ky. '05
*Rathborne, Merwyn R. W., Min. Engr.....Address wanted. '98
*Rattle, W. J., Min. Engr. and Anal. Chem.,
3628 Euclid Ave., Cleveland, Ohio. '84
*Rawlings, Stuart L., San Luis Mining Co., San Dimas, Durango, Mexico. '02
*Ray, Frank A., Cons. Min. Engr.....6 Deshler Bldg., Columbus, Ohio. '90
*Raymer, George S., Min. Engr.....51 Brattle St., Cambridge, Mass. '12
*Raymond, R. M., Min. Engr.....Apartado 740, Mexico City, Mexico. '85
Raymond, Rossiter W., Secretary Emeritus, American Institute of
Mining Engineers, 29 West 39th St., New York, N. Y.

†Rea, William H., Treas., Secy. of the Roll Association, 710 Lewis Bldg., Pittsburg, Pa. '86
*Read, J. Burns, Asst. Prof. Mining, Case School of Applied Science, Cleveland, Ohio. '13
*Read, Thomas T., Asso. Editor *Mining and Scientific Press*, 420 Market St., San Francisco, Cal. '03
*Reading, Richard W., Assayer, Care Soc. of California Pioneers, 5 Pioneer Pl., San Francisco, Cal. '02
*Reckhart, Daniel W., Assayer, Chem., Min. Engr., Box 88, El Paso, Tex. '01
*Recknagel, Rudolf, Min. Engr., 13 Austin Friars, London, E. C., England '96
*Redfearn, Albert M., Supt. Vanadium Dept., Primos Chemical Co., Newmire, Colo. '02
†Reece, Frederick B., Min. Engr.....Instructed to hold all mail. '86
*Reece, Philip P., Construction Engr.....Dallas, Iowa. '09
*Reed, Alfred C., Civ. Engr.....Port Orange, Volusia Co., Fla. '12
*Reed, David C., Min. Engr., Avenida 160, Barranco, Lima, Peru, South America. '01
*Reeder, Edwin C., Lidgerwood Mfg. Co., 1917 Fisher Bldg., Chicago, Ill. '08
*Reese, Arnold K.....Red House, Victoria Road, Penarth, Wales, G. B. '91
*Reese, John N.....516 Yale Ave., Youngstown, Ohio. '07
*Reeves, David..... Prest. Phœnix Iron Co., Philadelphia, Pa. '86
*Reeves, Thomas V., Min. Engr., North Star Mines Co., Grass Valley, Cal. '09
†Rehfuss, Louis A., Min. Engr.,.....1417 S. Broad St., Philadelphia, Pa. '11
†Rehfuss, William C., Student.....1417 S. Broad St., Philadelphia, Pa.
*Reichard, Max, Cons. Min. Engr., Bergwerk Kappel, Littenweiler, B. Freiburg, Br., Germany. '07
*Reid, Alexander S., Min. Engr., Care Waihi Gold Mining Co., Ltd., 11 Abchurch Lane, London, E. C., England. '07
*Reid, John H., Mine Mgr., Glen Smelting Co., Tent Hill, via Deepwater, New South Wales, Australia. '91
*Reid, John T., Min. Engr.....Lovelock, Nev. '03
*Reid, Joseph W., Min. Engr.....116 S. Front St., Memphis, Tenn. '06
*Reid, Robert S., Min. Engr., Calle Jofré 422, Santiago, Chile, So. Amer. '07
*Reinhardt, Gustav A., Asst. in Met. and Metallography, Harvard University, Rotch Bldg., Cambridge, Mass. '13
*Reinholt, Oscar H.....Bureau of Mines, Washington, D. C. '05
*Reischke, Herman, Mining.....Reveille, Nev. '06
*Reno, Jesse W., Min. Engr., Prest. and Mgr., Reno Inclined Elevator Co., 551 W. 33d St., New York, N. Y. '87
*Renshaw, William E., Mgr., Cons. Gem Mine & Newton Conc. Works, Idaho Springs, Colo. '00
*Renwick, Charles W., Asst. Genl. Mgr., Ducktown Sulphur, Copper & Iron Co., Isabella, Tenn. '02
*Requa, Mark L., Min. Engr., 1023–26 Crocker Bldg., San Francisco, Cal. '00
*Revell, George E.....P. O. Box 132, Nelson, B. C., Canada. '00
*Revere, Joseph W., Min. Engr., Purchasing Agent, Dominion Coal Co., Ltd., Glace Bay, Cape Breton, N. S., Canada. '81
*Revett, Benjamin S., Prest. and Genl. Mgr., Reliance Gold Dredging Co., Breckenridge, Colo. '96
*Reynders, John V. W., Vice-Prest., Penna. Steel Co.....Steelton, Pa. '12
**Reynolds, George B., Min., Met. Engr., 15 Victoria St., Westminster, London, S. W., England. '91
*Reynolds, Henry D. G., Min. Engr., Penn-Ariz. Min. Co., Walker, Ariz. '06

**Reynolds, Llewellyn.....Address wanted. '02
*Reynoso, José J., Min. Engr.....Apartado 768, Mexico City, Mexico. '08
*Rhew, James W., Supt., Penafiel Mine, Guanajuato Cons. M. & M. Co., Apartado 33, Guanajuato, Mexico. '07
**Rhodes, Charles, Met. Engr., Genl. Mgr., New Zealand Mines Trust, Ltd., Shortland St., Auckland, New Zealand. '98
*Rhodes, Clarence E., Care El Oro Min. & Ry. Co., Apartado 30, El Oro, Mex., Mexico. '05
*Rhodes, Francis B. F.....Bergerville, Prov. Quebec, Canada. '76
**Rhodes, Fred Norman, New Zealand Mines Trust Bldg., Shortland St., Auckland, New Zealand. '07
*Rhodes, William B., Civ., Min. Engr., Cia. Minera Jesus Maria y Anexas, San José de Gracia, Sinaloa, Mexico. '03
*Rice, Eugene R., Min. Engr...Southwestern Miami Dev. Co., Miami, Ariz. '08
*Rice, George S., Cons. Engr.....154 Nassau St., New York, N. Y. '86
*Rice, George Samuel, Chief Min. Engr., U. S. Bureau of Mines, 40th and Butler Sts., Pittsburg, Pa. '96
*Rice, John, General Crushed Stone Co., Inc.....Drake Bldg., Easton, Pa. '92
*Rice, John A., Min. Engr. and Geol., 519 Guaranty Trust Bldg., El Paso, Texas. '00
*Rice, John F.....Care S. A. A. Club, Spokane, Wash. '00
†Rice, William E., Master Mechanic, Ringwood Mines, Ringwood Manor, N. J. '13
*Rich, Frank A., Cons. Engr., Rich & Roche, Phœnix Chambers, Queen St., Auckland, New Zealand. '94
*Rich, William, Min. Engr., 1 Cambridge Gate, Regents Pk., London, N. W., England. '88
**Richard, George A., Genl. Mgr., Mt. Morgan Gold Mining Co., Ltd., Mount Morgan, Queensland, Australia. '97
**Richards, Edgar, Retired.....60 Ayrault St., Newport, R. I. '79
*Richards, F. B., Chem., Mgr., Iron Ore & Pig Iron Dept., M. A. Hanna & Co., Cleveland, Ohio. '90
*Richards, George M., Chief Min. Engr., Compagnie des Chemin de Fer du Congo Superieur aux Grand Lacs Africains, Kasindi via Mombasa, Belgian Congo, Africa. '11
*Richards, H. De C.....Crocker Bldg., San Francisco, Cal. '05
**Richards, Henry.....P. O. Box 108, Dover, N. J. '77
*Richards, John V., Min. Engr., Richards Bros., 1028 Old National Bank Bldg., Spokane, Wash. '03
*Richards, John W., Assayer and Chem..... .1118 19th St., Denver, Colo. '91
*Richards, Joseph W.....Prof. Met., Lehigh Univ., South Bethlehem, Pa. '05
Richards, Robert H., Prof. of Min. Engrg. and Met., Massachusetts Institute of Technology, Boston, Mass.
*Richards, W. J., Min. Engr., Genl. Mgr., The Philadelphia & Reading Coal & Iron Co., Pottsville, Pa. '90
*Richardson, Samuel H., Jr., Min. Engr., P. O. Box 297, Republic, Wash. '08
*Richardson, Warren V., Min. Engr., U. S. Deputy Mineral Surveyor, Tonopah, Nev. '03
*Richmond, Albert B., Min. and Cons. Engr., 44 W. Congress St., Tucson, Ariz. '01
*Richmond, William H.....Richmond Hill, Scranton, Pa. '87

*Rickard, Arthur J., Min. Engr.,
Stokember House, Penryn, Cornwall, England. '05
*Rickard, Brent N., Chem., Murray Plant, A. S. & R. Co., Murray, Utah. '07
**Rickard, Edgar, Business Mgr., *Mining Magazine*,
819 Salisbury House, London, E. C., England. '96
*Rickard, Forbes, Min. Engr.....508 Equitable Bldg., Denver, Colo. '92
*Rickard, Harold, Min. Engr.....Address wanted. '97
*Rickard, Richard D., Secy. and Treas., New York, Ontario & Western
Ry. Co., 3728 Grand Central Terminal, New York, N. Y. '80
**Rickard, T. A., Min. Engr., Editor, *Mining Magazine*,
819 Salisbury House, London, E. C., England. '88
*Ricketts, L. D., Min. Engr., Cananea Consolidated Copper Co.,
Cananea, Sonora, Mexico. '92
*Ricketts, Dr. P. de P., Min. and Met. Engr., Ricketts & Banks,
80 Maiden Lane, New York, N. Y. '73
†Ricks, Glenn A., Min. Engr., Geol.....Box 540, Virginia, Minn. '07
*Ridge, H. Mackenzie, Cons. Min. and Met. Engr.,
62 London Wall, London, E. C., England. '99
*Riebel, Otto F., Mine Supt.....P. O. Box 1890, Spokane, Wash. '92
*Riebling, Henry F. A., Met. Engr.....Lewiston, Idaho. '05
*Riedt, Carlos.....Kant-Str. 38a, Charlottenberg, Germany. '99
**Ries, Heinrich.....Prof. Econ. Geol., Cornell University, Ithaca, N. Y. '95
*Riggs, George W., Care L. Riggs, Jr., 27 William St., New York, N. Y. '74
*Righter, Thomas M., Vice-Prest., Midvalley Coal Co., Mount Carmel, Pa. '99
*Rightmire, Robert E., Fuel Engr., Consolidation Coal Co.,
Fairmont, W. Va. '12
*Riley. Lewis A., Min. Engr., Prest., Lehigh Coal and Navigation Co.,
437 Chestnut St., Philadelphia, Pa. '76
*Ring, Ambrose E., Mining Dept., Federal Lead Co.....Flat River, Mo. '05
*Rio, José P., Chief Engr., Irrigation & Water Supply of Brazil,
Bahia, Brazil, So. Am. '12
*Riordan, Denis M.....Room 2025a, 165 Broadway, New York, N. Y. '82
*Ripley, G. Clinton, American Zinc Co.....Mascot, Tenn. '09
*Rissmann, Otto.....Genl. Mgr., National Zinc Co., Bartlesville, Okla. '89
*Riter, George W., Secy., Eureka Hill Mining Co., Salt Lake City, Utah. '99
*Riter, Levi E., Jr., Min. Engr., 608 Utah Sav. & Trust Bldg.,
Salt Lake City, Utah. '08
*Ritter, Etienne A., Min. Engr., 1712 N. Nevada Ave.,
Colorado Springs, Colo. '04
*Robbins, Charles P.....P. O. Box 1910, Spokane, Wash. '97
*Robbins, Frank, Min. Engr.....Union Trust Bldg., Los Angeles, Cal. '97
*Robbins, Hallet R., Civ., Min. Engr.....P. O. Box 51, Seattle, Wash. '08
**Robbins, Percy A., Cons. Min., Mech., Elect. Engr., Hollinger
Gold Mines, Aura Lake P. O., Porcupine, Ont., Canada. '01
**Robellaz, Fernand, Min. Engr.....45 Rue de Pomereu, Paris, France. '98
*Roberts, Edward J., Supt., Corbin Coal & Coke Co., Ltd.,
P. O. Box 2147, Spokane, Wash. '02
*Roberts, Eugene C., Genl. Mgr.,
Hedstrom Coal Mining Co., 304 Ellicott Square, Buffalo, N. Y. '88
*Roberts, Frank C., Civ. Engr., Frank C. Roberts & Co.,
Real Estate Trust Bldg., Philadelphia, Pa. '87
**Roberts, George M., Associated Northern Blocks, Kalgoorlie, West. Aust. '92

*Roberts, Harry, Mine Mgr., Hale, Kanawha & Roberts Mines, Duluth, Minn. '97
*Roberts, J. C.....1225 Emerson St., Denver, Colo. '94
*Roberts, John T., Jr., Min. Engr.....350 Main St., Buffalo, N. Y. '09
*Roberts, Milnor, Prof. Mining and Met., School of Mines, University of Washington, University Station, Seattle, Wash. '02
*Roberts, Percival, Jr.....717 Arcade Bldg., Philadelphia, Pa. '77
*Roberts, Robert P., Genl. Smelter Foreman, Boston and Montana Reduction Works, Great Falls, Mont. '03
*Robertson, James D.....3815 Delmar Ave., St. Louis, Mo. '86
†Robertson, James L...7 Lennon St., Mosman, Sydney, N. S. W., Australia. '02
*Robertson, James R. M., Min. Engr., 38 Pitt St., Sydney, N. S. W., Aust. '03
*Robertson, William F., Prov. Mineralogist of British Columbia, Dept. of Mines, Victoria, B. C., Canada. '81
*Robeson, Anthony M., Cons. Mech. Engr., Care A. Moir, 1 London Wall Bldgs., London, E. C., England. '93
*Robeson, Jacob H., Mine Mgr..... 512 Ideal Bldg., Denver, Colo. '05
*Robins, Thomas.....Park Row Bldg., New York, N. Y. '92
*Robinson, C. Snelling, 2d Vice-Prest., The Youngstown Sheet and Tube Co., Youngstown, Ohio. '85
*Robinson, George H., Jr., Min. Engr., Itabira Iron Ore Co., Ltd., Care Wilson, Sons & Co., Rio de Janeiro, Brazil, So. Am. '06
*Robinson, Harry O., Min. Engr., University Club, 2a Bucareli 35, Mexico City, Mexico. '02
*Robinson, Sanford, Civ., Min. Engr., 1477 Ridge Way, Los Angeles, Cal. '90
*Robinson, Theodore W., 1st Vice-Prest., Illinois Steel Co., Commercial Natl. Bank Bldg., Chicago, Ill. '84
*Roby, Luther A., Engr.....1906 E. 82d St., Cleveland, Ohio. '79
*Rochling, H., Met., Ingenieur, Rochling Iron and Steel Works, Völklingen (bei Saar), Rhenish Prussia, Germany. '97
*Roddewig, George W., Engr .....Snow Storm Min. Co., Larson, Idaho. '12
*Roden, Benjamin F., Prest., Roden Coal Co.....Marvel, Ala. '12
*Roderick, James E., Chief of Bureau of Mines.....Harrisburg, Pa. '91
*Rodgers, Charles E., Min. Engr., Assayer, Motherlode Mill, Sheep Creek, B. C., Canada. '12
*Rodgers, George B., Min. Engr., 1724 Magnolia Ave., Knoxville, Tenn. '03
*Rodgers, Joseph H., Min. Geol.....2357 Eleventh Ave. N., Seattle, Wash. '09
*Rodgers, Myron K., Cons. Engr.....2338 Tenth Ave. N., Seattle, Wash. '94
*Rodriguez, Juan C., Min., Met. Engr., Apartado 87, Saltillo, Coah., Mex. '99
†Roe, Major-General Charles F.....35 East 37th St., New York, N. Y. '05
*Roe, James P., Mech. Engr., Genl. Supt., Iron Mills, Glasgow Iron Co., Pottstown, Pa. '91
*Roe, Joseph W., Asst. Prof. Mech. Engrg., Sheffield Scientific School, Yale Univ., New Haven, Conn. '10
*Roeber, E. F., Editor, *Metallurgical and Chemical Engineering*, 239 W. 39th St., New York, N. Y. '11
*Roebling, Charles G., Mfr. of Wire Rope.....Trenton, N. J. '06
*Roebling, Ferdinand W., Jr., Engr., Care John A. Roebling's Sons Co., Trenton, N. J. '06
†Roeser, Ernest B., Min. Engr.....Kanawha Falls, W. Va. '12
*Roeser, Frederick, Supt., Globe Plant, American Smelting & Refining Co., Denver, Colo. '94

*Roesler, Max B., Asst. Engr., Copper Queen Mines, Box 2223, Bisbee, Ariz. '07
*Rogers, Alexander P., Min. Engr.....25 Broad St., New York, N. Y. '04
*Rogers, Allen H.....201 Devonshire St., Boston, Mass. '92
*Rogers, Charles E., Fraser & Chalmers, Ltd., P. O. Box 1065, Johannesburg, Transvaal, So. Africa. '97
*Rogers, E. M., Cons. Min. Engr.....32 Broadway, New York, N. Y. '82
*Rogers, William B., Min. Engr.....60 Broadway, New York, N. Y. '12
*Rohlfing, Diedrich P., Min. Engr.....Farrell, via Mazuma, Nev. '06
*Rohn, Oscar, Min. Engr.....East Butte Copper Mining Co., Butte, Mont. '05
*Rolker, Charles M..... .....1 Leadenhall St., London, E. C., England. '74
*Rolle, Sidney, Min. Engr., U. S. Metals Refining Co.....Chrome, N. J. '13
*Rone, Lloyd A., Min. Engr., Cia Minera "San Mateo," S. A., Apartado 36, Velardena, Dur., Mexico. '05
*Rood, Vernon S., Mine Supt., Utah Apex Mining Co., Bingham Canyon, Utah. '12
*Roote, Gilbert J., Min. Engr.....Russ Bldg., San Francisco, Cal. '00
*Ropp, Alfred von der, Met.....71 Broadway, New York, N. Y '01
*Rose, Carlton R., Met.....United States Zinc Co., Pueblo, Colo. '02
*Rose, George E., Blast Furnace Supt.....6017 Kimbark Ave., Chicago, Ill. '07
*Rose, Hugh, Min. Engr....Cia. de Santa Gertrudis, Pachuca, Hid., Mexico. '00
*Rose, William W., Mine Broker.....1428 Montana St., El Paso, Texas. '82
*Rosenfeld, Louis, Mining.....Merchants Exchange, San Francisco, Cal. '99
*Rosewarne, David D., Mine Engr., Royal Colonial Inst., Northumberland Ave., London, W. C., England. '90
*Ross, Alexander J. M., Asst. Min. Engr., Homestake Mining Co., Lead, S. D. '07
*Ross, Frank A., Cons. Engr.....Spokane Club, Spokane, Wash. '85
*Ross, Gilbert McM., Mine Mgr.....Yosemite Club, Stockton, Cal. '05
*Ross, Herbert W., Experimental Engr., Backus & Johnston Co., Casapalca, Peru, So. America. '08
*Ross, James G., Cons. Min. Engr., Milton Hersey Co., 171 St. James St., Montreal, Canada. '07
*Ross, John, Jr., Supt.....Wildman Syndicate, Sutter Creek, Cal. '96
*Ross, Lewis P., Mgr.....Northern Iron Co., Standish, N. Y. '06
*Rossi, Auguste J., Electro-Metallurgy.....35 Broadway, New York, N. Y. '92
*Rothschild, Clarence G., Min. Engr. and Operator, 43 Leonard St., New York, N. Y. '05
*Rowand, Lewis G., Elect. Engr. and Met., Care The New Jersey Zinc Co., 55 Wall St., New York, N. Y. '02
*Rowe, Fremont S., Supt., Hecla Mine.....Burke, Idaho. '12
*Royce, Stephen, Mine Surveyor...Pickands, Mather & Co., Hurley, Wis. '09
*Rubel, Milton L., Min. Engr., Mgr., Pilones Min. Co., Topia, Dur., Mexico. '06
*Rudra, Sarat C., Min. Engr.....2963 Webster St., San Francisco, Cal. '04
*Ruetschi, Rudolf, Cons. Engr.....P. O. Box 626, Hammond, Ind. '91
*Ruggles, Guy H., Min. Engr.....Clifton, Ariz. '09
*Ruhl, Louis, Roessler & Hasslacher Chemical Co., 100 William St., New York, N. Y. '98
*Rule, J. Arthur, Assayer, Rio Tinto Copper Co., Terrazas, Chih., Mexico. '06
*Rumbold, William R., Min. Engr., Union Club, Trafalgar Sq., London, England. '06
†Runyon, Walter C., Hotel Marie Antoinette, Broadway and 67th St., New York, N. Y. '92

**Rushmore, David B., Elect. Engr., Power and Mining Engineering Dept., General Electric Co., Schenectady, N. Y. '07
*Russel, H. Yelverton, Min. Engr.....423 Guy St., Montreal, Canada. '06
*Russel, Walter S., Vice-Prest., Genl. Mgr., Russel Wheel & Foundry Co., Detroit, Mich. '86
*Russell, Branch E., Min. Engr.....Address wanted. '09
†Russell, Charles M., Prest., Massillon Iron & Steel Co., Massillon, Ohio. '11
*Russell, Edward H.....P. O. Box 496, New Haven, Conn. '84
*Russell, William, Met., Woodstock, Grove Crescent Rd., Kingston-on-Thames, England. '02
*Rutherford, Forest, Asst. Supt. of Reduction Works, Care Copper Queen Reduction Works, Douglas, Ariz. '00
*Rutherford, William P., Jr., Min. Engr., Tharsis Sulphur & Copper Co., 136 W. George St., Glasgow, Scotland. '09
*Rutledge, John J., Min. Engr., Geol., Bureau of Mines, 40th and Butler Sts., Pittsburg, Pa. '05
*Ryall, George M., Vice-Prest., Pac. S. & M. Co., 42 Broadway, New York, N. Y. '12
*Ryan, John D., Mine Mgr.....42 Broadway, New York, N. Y. '05
*Ryan, W. A.....Tati Concessions, Ltd., Francistown, Tati, So. Africa. '10
*Ryder, Irving L., Min. and Civ. Engr.....555 S. 4th St., San José, Cal. '10
*Ryder, Thomas J.....Apartado 1203, Mexico City, Mexico. '01

*Sackett, Charles T., Civ. and Min. Engr.. .....Livingston, Mont. '11
*Sahlin, Axel, Cons. Engr., Care Julian Kennedy, Sahlin & Co., 52 Rue des Congrés, Bruxelles, Belgium. '91
†Sahlin, Robert C., Care Tata Iron & Steel Co., Sakchi, via Kalamati, B. N. R., India. '11
*Sakikawa, Motaro, Min. and Met. Engr., 1116 Omachi, Kamakura, Sagami, Japan. '02
*Salas, Luis E., Anal. Chem..... .....1922 Daly Ave., New York, N. Y. '12
†Sale, William R., Min. Engr.....South Burnie, Tasmania. '03
*Sales, Reno H., Min. Engr., Geol., Anaconda Copper Mining Co., 524 Hennessey Bldg., Butte, Mont. '02
*Salisbury, Earl F.....Villaldama, Nuevo Leon, Mexico. '06
*Salom, Pedro G., Chem., Prest., Electrical Lead Reduction Co., 1409 Commonwealth Bldg., Philadelphia, Pa. '80
*Salsich, Le Roy, Min. Engr., Asst. Genl. Supt., Oliver Iron Mining Co., Coleraine, Minn. '03
**Samwell, Nicholas, Min. Engr. .....P. O. Box, 385, Rangoon, Burma. '01
†Sanborn, Edward H., Berwind-White Coal Mining Co., Arcade Bldg., Philadelphia, Pa. '91
*Sanborn, James F., Care Board of Water Supply, 299 Broadway, New York, N. Y. '99
**Sandberg, C. P., Cons. and Inspecting Engr., Palace Chambers, 9 Bridge St., Westminster, London, S. W., England. '81
†Sanders, Alfred D., Mgr., General Sandur Mining Co., Ramandrug, via Hospet, S. M. Railway, India. '95
*Sanders, Bernard H., Min. Engr., 5 and 7 Upper Thames St., London, E. C., England. '11
*Sanders, John D., Asst. Mgr.....Solvay Process Co., Detroit, Mich. '79
*Sanders, R. H., Min. Engr.....617 Drexel Bldg., Philadelphia, Pa. '76

*Sanders, Wilbur E., Cons. Min. Engr.....Address wanted. '85
*Sanderson, Henry S., Met. Engr. and U. S. Geol. Surveyor,
235 Foster Bldg., Denver, Colo. '01
*Sandifer, Harmer C., Min. Engr., American Club, Mexico City, Mexico. '00
†Sandoval, Aurelio, Banker.....1142 West Adams St., Los Angeles, Cal. '02
†Sandoval, Prospero, Banker...P. Sandoval & Co., Nogales, Sonora, Mex. '02
*Sargent, George W., Chem. and Met., Crucible Steel Co. of America,
Oliver Bldg., Pittsburg, Pa. '89
*Sargent, Fitz-William, Chief Engr., Am. Brake Shoe & Fdy. Co.,
Mahwah, N. J. '12
*Sargent, William D.....Hutton Park, West Orange, N. J. '96
*Saunders, T. Skewes, Min. Engr., Teziutlan Copper Co.,
Aire Libre, Pue., Mexico. '12
*Saulles, Charles A. H. de, Am. Smelt. & Refin. Co.,
165 Broadway, New York, N. Y. '12
*Saunders, William E.....Torrisdale, Pa. '89
*Saunders, William L., Prest., Ingersoll-Rand Co.,
11 Broadway, New York, N. Y. '06
*Sauveur, Albert.....Prof. Met., Harvard University, Cambridge, Mass. '92
*Savage, Arthur E., Met.,
Castlereagh House, Castlereagh St., Sydney, N. S. W., Australia. '91
*Savage, John A., Asst. to Vice-Prest., Shenango Furnace Co.,
622 Frick Bldg., Pittsburg, Pa. '06
*Sawyer, Arthur H.....Baltic Mining Co., Redridge, Mich. '06
*Sawyer, Haven, Min. Engr.....Boise, Idaho. '04
**Saxman, Charles W., Min. Engr.....Instructed to hold all mail. '06
*Saxman, Edwin F.....Villanova, Pa. '06
*Sayre, Hal., Min. Engr.....815 Logan Ave., Denver, Colo. '89
*Sayre, Mortimer F.....Croton Magnetic Iron Mines, Brewster, N. Y. '09
†Scaife, Charles C.....221 1st Ave., Pittsburg, Pa. '86
*Scaife, Hazel L., Genl. Mgr.....Carmen Mining Co., Clinton, S. C. '11
**Scaife, James V., Vice-Prest. and Treas., William B. Scaife &
Sons Co., 221 1st Avenue, Pittsburg, Pa. '01
**Scaife, Oliver P.....P. O. Box 974, Pittsburg, Pa. '78
**Scaife, William B.....Structural Iron Works, Oakmont, Pa. '01
**Scaife, William L., Scaife Foundry and Machine Co.....Pittsburg, Pa. '79
†Scallon, William.....Helena, Mont. '90
*Scarborough, Francis W., Min. Engr....723 E. Main St., Richmond, Va. '02
**Schader, Carl F., Mine Mgr., "Seaside Terrace,"
Ocean Front Promenade, Santa Monica, Cal. '03
*Schader, Herbert G., Min. Engr.....Kingman, Ariz. '09
*Scheble, Max C., Min. Engr., Asst. Mgr., Cia. Carbonifera Agujita
and Anexas, S. A., Lampacitos, Coah., Mexico. '11
*Scheffler, F. G., Min. Engr., Cie Mines de Compinas,
Encruzilhada, Rio Grande do Sul, Brazil, So. Am. '05
*Schiertz, Ferdinand A., Min., Met. Engr...58 Cedar St., Roxbury, Mass. '97
*Schiffner, Carl, Prof. Met., Donatsring 1i, Freiberg, Saxony, Germany. '04
*Schiffner, Otto C., Min. Engr.....Dale, via Amboy, Cal. '12
*Schlacks, Charles H., 1st Vice-Prest., Western Pacific Ry. Co.,
929 Mills Bldg., San Francisco, Cal. '09
**Schlapp, Herman H., Cons. Min. Engr. and Met.,
163 William St., Melbourne, Victoria, Australia. '96

*SCHLERETH, C. QUINBY, Examining Engr., Penoles Exploration Co., Apartado 266, Mexico City, Mexico. '07
*SCHLESINGER, FERDINAND, Prest., Newport Mining Co., Lock Box 418, Milwaukee, Wis. '90
*SCHMIDT, HENRY C., Mine Supt., Apartado 327, Monterey, N. L., Mexico. '08
†SCHMIEDELL, JOHANN H., Merchant, Care Aschhoff & Co., Market Bldgs., Mincing Lane, London, E. C., England. '03
**SCHNEIDER, ALBERT F., Cons. Met. and Min. Engr., 132 Hodge Ave., Buffalo, N. Y. '74
*SCHNEIDER, GEORGE W., Min. Engr.....Golden, Colo. '12
*SCHNIEWIND, DR. F. W. C., Prest., Schniewind Coke Oven Co., 6 Church St., New York, N. Y. '02
*SCHNITZEL, HENRY, Min. Engr.....Lead, S. D. '00
*SCHOFIELD, WALTER D., Min. Engr., Mine Safety Car No. 2, Trinidad, Colo. '12
*SCHOFIELD, WILLIAM MCN., Min. Engr., J. R. Gilman Interests, Eckman, W. Va. '12
*SCHOLZ, CARL.....139 W. Van Buren St., Chicago, Ill. '96
*SCHOLZ, OSCAR F.....Lacon, Ill. '04
*SCHORR, ROBERT, Mech. Engr., Postal Telegraph Bldg., San Francisco, Cal. '01
*SCHRADER, ERICH J., Min. Engr., Gen. Mgr., Pittsburgh-Dolores Mining Co., Rockland Mine, via Yerington, Nev. '06
*SCHRADER, FRANK C., Geol... U. S. Geological Survey, Washington, D. C. '03
*SCHRADER, GUSTAVE, Min. Engr.....Box 5, Sutter Creek, Cal. '09
*SCHRÖDER, HAROLD, Met., Mgr., English & Australian Copper Co., Ltd., Waratah. '09
Schroedter, Dr. Jng. h. c. Emil.....Breitestrasse 27, Düsseldorf, Germany.
†SCHROPP, ABRAHAM S.....107 Market St., Bethlehem, Pa. '86
*SCHROTER, George A., Min. Engr.....111 Broadway, New York, N. Y. '04
*SCHUETTENHELM, JOHN B., Chem.....Goldfield, Nev. '12
*SCHUMACHER, A. J., Mgr.....Blue Mountain Iron Wks., Baker City, Ore. '89
*SCHUMACHER, WILHELM, Engr., Haberlandstr. 2, Berlin, W. 30, Germany. '12
*SCHWAB, CHARLES M., Prest., Bethlehem Steel Co., 111 Broadway, New York, N. Y. '91
*SCHWARZ, CHARLES E., Min. Engr.....6029 Maple Ave., St. Louis, Mo. '02
*SCHWARZ, THEODORE E., Min. Engr.....106 Marion St., Brookline, Mass. '76
*SCHWEMANN, AUGUST.....Crefelder Str. 41, Aachen, Germany. '05
*SCHWENNESEN, ALVIN T., Min. Engr..... .....Livermore, Cal. '11
*SCHWERIN, CLARENCE M., Met., Mgr., Coke Dept., Vinton Colliery Co., 1 Broadway, New York, N. Y. '01
*SCOBEY, JESSE C., Min. Engr.....3424 Colfax Ave. "B," Denver, Colo. '04
*SCOTT, DUNBAR D., Cons. Engr., Dept. of Precision Instruments, Bausch & Lomb Optical Co., Rochester, N. Y. '98
*SCOTT, EDWARD HARLAN, Mine Supt., 517 Crocker Bldg., San Francisco, Cal. '03
*SCOTT, HERBERT KILBURN, Cons. Min. Engr., 46 Queen Victoria St., London, E. C., England. '00
*SCOTT, JAMES, Genl. Supt., Blast Furn., Carnegie Steel Co., 5635 Stanton Ave., Pittsburg, Pa. '90
*SCOTT, OSWALD N., Min. Engr., Dominion Bond Bldg., Toronto, Ont., Can. '07
*SCOTT, WALTER M. H., Min. Engr., P. O. Box 834, Rio de Janeiro, Brazil, So. America. '08
*SCOTTEN, FRANK C., Civ. Engr., Boston & Montana Co., Great Falls, Mont. '03
*SCOULAR, ALEXANDER C., Min. Engr..."Fernaere," Whitehaven, England. '08

*Scovil, Henry H., Mech. Engr., Asst. Secty., Ry. Steel Spring Co., 30 Church St., New York, N. Y. '05
*Scranton, William W., Prest., Scranton Gas and Water Co., Scranton, Pa. '75
*Scrutton, Thomas C., Min. Engr., 18 Billiter St., London, E. C., England. '03
*Seal, Albert E., Min. Engr....8 The Grove, Muswell Hill, London, Eng. '01
**Seaman, Henry B., Cons. Engr.....165 Broadway, New York, N. Y. '89
*Seaman, H. J., Genl. Supt.....Atlas Portland Cement Co., Catasauqua, Pa. '82
*Searles, Dennis, Pacific Coast Borax Co.....Albany Block, Oakland, Cal. '00
*Searles, Linn W., Cons. Engr., 201 Woodward Bldg., Birmingham, Ala. '02
*Sears, Mortimer A., U. S. Mineral Inspector, 712 E. & C. Bldg., Denver, Colo. '03
*Sears, Stanley C., Min. Engr., Met., Genl. Mgr., Utah Apex Min. Co., Bingham Canyon, Utah. '07
*Sebben, Edward W., Met., Geol .....1331 Humboldt St., Denver, Colo. '03
*Sebenius, J. Uno, Supt. of Mineral Lands and Exploration, Oliver Iron Mining Co., Wolvin Bldg., Duluth, Minn. '90
*Sedgwick, Allan E., Min. Engr., 2ª Calle de Bucaveli 35, Mexico City, Mexico. '12
*Seeber, Rex R., Min. Engr..... .....Winona, Mich. '02
*Segsworth, Walter E., Min. Engr...103 Bay St., Toronto, Ont., Canada. '08
**Seibert, Percy A., Mgr., Andes Tin Co., La Paz, Bolivia, So. America, via Panama. '12
*Selbie, Charles C., Assayer, Chem., Chosen Mining Co., Ko Sung Mines, Yeng Byen, Korea. '10
*Self, Edward D., Min. Engr., 147 So. Orange Ave., South Orange, N. J. '96
**Seligman, Albert J., Banker, Seligman & Meyer, 38 E. 50th St., New York, N. Y. '82
*Selkirk, William, Min. Engr.....62 London Wall, London, E. C., Eng. '00
*Sellerier, Carlos, Min. Engr., 92, 4ª Calle de Carpio, Mexico City, Mex. '05
*Semple, Clarence C., Min. Engr., Met., 393 Summer St., Stamford, Conn. '03
*Senghenydd, Lord Merthyr of....."Mardy," Aberdare, Wales, G. B. '91
*Sessinghaus, Gustavus, Min. Engr., Central Natl. Bank Bldg., St. Louis, Mo. '98
†Sethna, Nanabhoy R., Student..... ....Address wanted. '12
*Setz, Gustav.....P. O. Box 961, San Antonio, Tex. '77
*Severy, Clarence L., Min. Engr.....385 Oakland Ave., Pasadena, Cal. '12
*Seyfried, Rudolf von, Asst. Supt., Smelting Works, 79 Hillside Ave., Newark, N. J. '07
*Shaler, Millard K., Min. Engr., Société Internationale Forestière et Minière du Congo, 4 Montague du Parc, Bruxelles, Belgium. '07
**Shallcross, Vincent F., Min. Engr., 65 St. Georges Terrace, Perth, West. Aust. '99
*Shanks, David W., Min. Engr., Genl. Mgr., Rio Plata Min. Co., 809 Title Insurance Bldg., Los Angeles, Cal. '03
*Shannon, Charles M., Mining.....California Club, Los Angeles, Cal. '04
*Sharp, Alexander, Min. Engr., 2526 W. 7th Ave., Vancouver, B. C., Canada. '10
*Sharp, Bert N., Min. Engr.....P. O. Box 202, Republic, Wash. '13
*Sharp, William G., Min. Engr..... ...55 Congress St., Boston, Mass. '91
*Sharples, Stephen P., Chem. and Assayer.....26 Broad St., Boston, Mass. '78
*Sharpless, Frederick F., Min. Engr.....Westbury Sta., L. I., N. Y. '89
*Sharwood, William J., Met. Chem., Homestead Mining Co...Lead, S. D. '01
*Shaw, Alexander J. M., Min. Engr., Pekin Synd., Ltd., Ja Mei Sen Colliery, Chiao Tso, Honan, North China. '11

*Shaw, Howard I.....Lakeside, San Diego Co., Cal. '05
*Shaw, James B., Met.....41 Wicksteed St., Danganin, New Zealand. '07
*Shaw, Joseph S., Genl. Mgr., Fort Worth Builders Supply Co.,
836 Monroe St., Fort Worth, Tex. '09
**Shaw, S. F., Min. Engr.....Room 507, 136 Liberty St., New York, N. Y. '07
*Sheadle, Jasper H., Secy., Cleveland-Cliffs Iron Co.,
Rockefeller Bldg., Cleveland, Ohio. '13
*Sheafe, Harry J., Min. Engr.....El Dorado, Cal. '02
*Sheafer, Arthur W., Min. Engr. and Geol.....Pottsville, Pa. '80
*Shedd, Prof. S., Teacher of Geol. & Mineralogy, Washington Agricultural
College and School of Science, Pullman, Wash. '01
*Shepard, Edward M., Prof. of Geol., Field Asst.,
U. S. Geological Survey, 1403 Benton Ave., Springfield, Mo. '94
*Shera, Edward L., Mech. Engr.....421 N. 6th St., Tacoma, Wash. '06
*Sheridan, Jo. E., U. S. Mine Inspector.....Silver City, N. M. '04
*Sherman, Frederick W., Mill Supt., Daly-West Min. Co., Park City, Utah. '03
*Sherman, Gerald F. G., Civ. and Min. Engr.,
Copper Queen Consolidated Mining Co., Bisbee, Ariz. '03
*Sherman, Scott H., Supt., Gila Copper Sulphide Co.....Christmas, Ariz. '04
*Sherrerd, Alexander H., Cons. Min., Met. Engr.,
754 Parker St., Newark, N. J. '75
*Sherrerd, John M., Min. Engr.....340 Spring Garden St., Easton, Pa. '80
*Sherwood, Franklin P., Min. Engr., Care H. C. Sherwood, 34 Pine St.,
New York, N. Y. '05
*Shimer, Porter W., Chem. and Met.....Chemical Laboratory, Easton, Pa. '79
*Shimer, William R., Met.....Bethlehem Steel Co., So. Bethlehem, Pa. '12
†Shipp, Ellsworth M., Cons. Met. Engr...2 Rector St., New York, N. Y. '05
*Shiras, W. McGilvray, Asst. Ore Agent, Carnegie Steel Co.,
Carnegie Bldg., Pittsburg, Pa. '02
**Shockley, William H., Min. Engr., Care Natl. Safe Deposit Co.,
1 Queen Victoria St., London, England. '83
*Shoemaker, George M., Mgr., Virginia-Lee Co., Inc., Pennington Gap, Va. '09
*Shook, James W.....Holt, Ala. '00
*Short, Frank R., Min. Engr., 1057 Monadnock Bldg., San Francisco, Cal. '99
*Showers, Charles H.....Apartado 68, Mazatlan, Sin., Mexico. '05
*Shriver, Henry, Chairman, U. S. Rail Co.....Cumberland, Md. '00
*Shurick, Adam T., Asso. Editor, *Coal Age*, 505 Pearl St., New York, N. Y. '04
*Shutts, Arthur B.....Instructed to hold all mail '11
*Siderfin, William C., Assayer.....P. O. Box 1368, Butte, Mont. '91
*Siebenthal, Claude E., Geol., U. S. Geological Survey, Washington, D. C. '12
*Siebenthal, Wade A., Supt. of Mines.....Republic, Mich. '12
**Siebert, Frederic J., Min. Engr.....Reno, Nev. '02
*Sieboth, Alfred C., Min. Engr.....Florence, Ariz. '07
**Silliman, Arthur P., Min. Engr. and Chem., Operator of
Diamond and Churn Drills, Hibbing, Minn. '98
*Silva, Livio, Chem. and Min. Engr.....89 Broadway, Shanghai, China. '13
*Silvester, George E., Civ. and Min. Engr., Chief Engr.,
Canadian Copper Co., Copper Cliff, Ontario, Canada. '03
*Simington, Francis J., Supt. of Const., Kusel & Harris Co.,
516 Stock Exchange, Chicago, Ill. '13
*Simmersbach, Oscar, Prof., Royal Technical Academy,
Breslau, XVI, Parkstrasse 21, Germany. '10
*Simon, Trevor B., Min. Engr.....124 King Ave., Columbus, Ohio. '07

*Simonds, Ernest H., Met. Engr....1108 Crocker Bldg., San Francisco, Cal. '95
*Simonds, Francis M., Min. Engr., Simonds & Burns,
55 Liberty St., New York, N. Y. '88
*Simpson, C. D.....P. O. Box 545, Scranton, Pa. '85
*Simpson, James C., Min. Engr.,
The Avenue, Greenhill Gardens, Edinburgh, Scotland. '06
*Simpson, Kenneth M.....P. O. Box 565, Goldfield, Nev. '11
*Simson, Augustus, Min. and Com. Agent..... .....Launceston, Tasmania. '97
*Sinclair M. J., Mine Supt.,.....Kellogg, Idaho. '12
*Singewald, Joseph T., Jr., Geol.....17 W. 29th St., Baltimore, Md. '12
*Singmaster, J. Arthur, Genl. Supt., New Jersey Zinc Co., Palmerton, Pa. '13
**Sinn, Alphonse.....Bienne, Switzerland. '00
*Sinn, Francis R., Chief Spelter Dept., N. J. Zinc Co. of Pa., Palmerton, Pa. '11
*Sirdevan, William H.....Tonopah Mining Co., Tonopah, Nev. '11
*Sizer, Frank L., Mine Engr., 812 Merchants Exchange Bldg.,
San Francisco, Cal. '00
**Sjögren, Hjalmar, Geol., Prof., Dir. Mineral. Dept. of State Natural
History Museum, Academy of Science, Stockholm, Sweden. '91
*Skeels, Lee H., Civ., Min. Engr., 1239 S. Farwell St., Eau Claire, Wis. '08
*Skelley, Robert D., Min. Engr.....135 Orange St., Riverside, Cal. '07
*Skerritt, Alfred W., Min. Engr.....Kapsan Mine, Doten, Korea. '13
*Skewes, Edward, Min. Engr., 47 East St., Lindley, Haddenfield, England. '95
*Skewes, Henry B., Mine Supt., Cyanide Chem., Box 141, Grass Valley, Cal. '06
*Skinner, Edmond N., Min. Engr.,.....14 Wall St., New York, N. Y. '03
*Skinner, Orville C., Asst. Supt., Standard Steel Works Co., Burnham, Pa. '98
*Slater, Amos, Min. Engr.....1043 Henry Bldg., Seattle, Wash. '01
*Slattery, Michael J., Mining...Apartado 77, Guadalajara, Jal., Mexico. '09
*Slee, William E., Smelter Foreman, Bagot St., Wallaroo, So. Australia. '11
*Sleeman, Herbert R., Mine Engr., Care Whim Well Copper Mines, Ltd.,
Whim Creek, West Australia. '05
*Sloan, W. Arthur, Chief Chem.....Shannon Copper Co., Clifton, Ariz. '03
*Slosson, Henry L. Jr., Min. Engr....265 Russ Bldg., San Francisco, Cal. '12
*Slusher, Dale, Economic Geol., Field Mgr., Oil Fields of Mexico Co.,
Furbero, Papantla, V. C., Mexico. '08
*Smale, Frank L., Mine Supt..... ..... 314 So. Fifth St., Victor, Colo. '04
**Small, George W., Min. Engr. and Met.....Visalia, Cal. '85
*Small, Harvey B., Min. Engr., Care Olimpo del Valle, Mangangue,
Colombia, So. America. '04
*Small, Warren N., Prest., El Paso Foundry & Mach. Co., El Paso, Tex. '00
*Smalley, William W., Min. Engr. and Assayer, Associated Pipe
Line Co., Box 797, Coalinga, Cal. '04
*Smart, Robert, Territorial Assayer....White Horse, Yukon Ter., Canada. '07
*Smeeth, William F., State Geol. in Mysore,
Bangalore, Mysore Prov., So. India. '04
*Smillie, Sheldon, Min. Engr.....Aspen, Colo. '04
†Smink, Frank C.....Prest., Reading Iron Co., Reading, Pa. '92
*Smith, Albert W., Prof. Met., Case School of Applied Science,
Cleveland, Ohio. '97
*Smith, Alexander Henry, Cons. Engr.....So. Porcupine, Ont., Canada. '06
†Smith, Alexander Herbert, Min. Engr.....Gateway, B. C., Canada. '07
*Smith, Alfred M., Prof. of Chem. and Met., Ballarat School of Mines,
Ballarat, Victoria, Australia. '00

*Smith, Charles H., Vice-Prest. and Genl. Mgr., Durham Coal & Iron Co., James Bldg., Chattanooga, Tenn. '10
*Smith, Charles S., Prest., Old Dominion Copper Min. & Smelting Co., 50 Congress St., Boston, Mass. '13
*Smith, Edward A., Min. Engr.....3a Dinamarca 50, Mexico City, Mexico. '03
*Smith, Eugene A., State Geol.....University, Ala. '09
*Smith, E. A. Cappelen, Met., Am. Smelt. & Refin. Co., 165 Broadway, New York, N. Y. '04
*Smith, E. Percy, Min. Engr.....15 William St., New York, N. Y. '02
*Smith, Frank D. G., Chem. and Assayer, Mgr, Santo Domingo Mining Co., Batopilas, Chih., Mexico. '06
*Smith, Frank M., Mgr., East Helena Plant, American Smelting & Refining Co., East Helena, Mont. '92
†Smith, Franklin W., Min. Engr., Clark's Engineering and Assay Office, Bisbee, Ariz. '03
*Smith, Frederick D., Mgr.....Snow Creek Mine, Greenhorn, Ore. '01
**Smith, George, Government Inspector of Mines, Dept. of Mines, Sydney, New South Wales, Australia. '92
**Smith, George Otis, Director, U. S. Geol. Survey.....Washington, D. C. '02
*Smith, H. De Witt, Min. Engr.....Alice, Colo. '09
*Smith, Henry P., Genl. Mgr., Guanajuato Reduction & Mines Co., Apartado 557, Guanajuato, Mexico. '11
*Smith, Hoval A., Min. Engr.....Bisbee, Ariz. '02
**Smith, Howard D., Min. Engr.....619 Kohl Bldg., San Francisco, Cal. '02
*Smith, Howard I., U. S. Bureau of Mines, 40th and Butler Sts., Pittsburg, Pa. '08
*Smith, J. William, Cons. Engr., 43 White Memorial Bldg., Syracuse, N. Y. '81
*Smith, James W., Mgr.....Trenton Iron Co., Trenton, N. J. '12
*Smith, Lyon, Min. Engr.....P. O. Box 85, Blair, Nev. '10
*Smith, Noah B., Smith, Rudy & Co.....411 Walnut St., Philadelphia, Pa. '86
*Smith, Oberlin, Mech. Engr., Prest., Ferracute Machine Co., Bridgeton, N. J. '84
*Smith, P. Bosworth, Min. Engr. and Mine Mgr., Mysore West. and Mysore Wynand Gold Mining Co., Tank Mine, Oorgaum, So. India. '95
*Smith, Reuben E., Min. Engr.....Care C. L. Smith, Vladivostok, Siberia. '12
*Smith, Richard L., Civ., Min. Engr...H. W. Oliver Bldg., Pittsburg, Pa. '05
*Smith, Stewart K.....5541 Maple Ave., St. Louis, Mo. '07
*Smith, Sumner S., U. S. Mine Inspector.....Juneau, Alaska. '11
*Smith, Sydney, Min. Engr.....Juneau, Alaska. '12
*Smith, Walter F., Vice-Prest., Carolinas Monazite Co., 412 United Gas Improvement Bldg., Philadelphia, Pa. '06
*Smith, Webb, Supt.....Kennedy M. & M. Co., Martell, Cal. '12
*Smith, William A.....St. Joseph Lead Co., Herculaneum, Mo. '98
**Smock, John C., Geol.....Trenton, N. J. '73
*Smoot, Albert M., Chemist, Ledoux & Co., 99 John St., New York, N. Y. '04
*Smyser, Albert E., Asst. Genl. Mgr., La Belle Iron Wks., Steubenville, O. '06
*Smyth, Charles H., Jr., Dept. Geology, Princeton Univ., Princeton, N. J. '87
*Smyth, Henry Lloyd, Prof. of Mining and Met.....Watertown, Mass. '90
*Smyth, John G., Chief Engr.....Consolidation Coal Co., Jenkins, Ky. '08
*Smythe, Hedley V., Supt. Northern Pyrites Co., Graham, via Fort William, Ont., Canada. '10
**Snelling, Walter O., Cons. Engr., 1707 Union Bank Bldg., Pittsburg, Pa. '06

*Snover, George R., Min. Engr. and Met.....Mount Clemens, Mich. '01
*Snow, Charles H., Civ. and Min. Engr., Dean School of Applied Science, New York University, University Heights, New York, N. Y. '91
*Snow, Frederick W., Min. Engr.....17 Franklin St., Lynn, Mass. '07
*Snyder, Baird, Jr., Cons. Engr.....Pottsville, Pa. '04
*Snyder, Frederick T., Metallurgic Engrg. Co., Monadnock Bldg., Chicago, Ill. '99
*Snyder, Henry S., Vice-Prest., Bethlehem Steel Co., So. Bethlehem, Pa. '12
*Snyder, William C., Div. Supt., Lehigh Valley Coal Co., Snow Shoe, Pa. '06
*Soest, Walter E., Chem. and Met., Care Foreign Club, Chihuahua, Mexico. '03
**Solomon, Tomas, Genl. Supt. of Mines.....Apartado 39, Pachuca, Mexico. '05
*Somerset, Harry St. John, Jr., Chem. and Assayer, Care J. Bowie Wilson, Hunter's Hill, Sydney, N. S. W., Australia. '05
*Sommercamp, Earl W., Assayer.....Vale, Ore. '08
*Sonne, O. H., Chem., Assayer, Supt. McConnell Mine, Box H, Yerington, Nev. '06
**Sonnemann, George A., Min. Engr.....The Rookery, Spokane, Wash. '91
*Soper, Edgar K., Instructor, Econ. Geol., Univ. of Minn., Minneapolis, Minn. '09
*Souder, Harrison.....Cornwall Ore Bank Co., Cornwall, Pa. '00
*Spalding, Ely P., Min. Engr.....1017 Paulsen Bldg., Spokane, Wash. '02
*Spangler, Howard, Min. Engr.....San Fernando Bldg., Los Angeles, Cal. '06
*Sparks, James T., Min. Engr. and Supt.....Baldy, N. M. '12
*Speller, Frank N., Met. Engr.....National Tube Co., Pittsburg, Pa. '05
*Spence, George, Mining Mgr., R. E. Briggs Co., S. A., Calle Gante 8, Mexico City, Mexico. '02
*Spence, Harold C. E., Min. Engr., West Merigonish, Pictou Co., N. S., Canada. '03
**Spencer, Arthur C., Geol...U. S. Geological Survey, Washington, D. C. '01
**Sperr, Frederick W., Prof. of Civ. and Min. Engrg., Michigan College of Mines, Houghton, Mich. '82
*Sperry, Erwin S., Met.....260 John St., Bridgeport, Conn. '94
*Spicer, Philip O., Civ., Min. Engr., P. O. Box 544, New Westminster, B. C., Canada. '11
*Spiers, James, Mech. Engr.....834 Mills Bldg., San Francisco, Cal. '94
*Spilsbury, E. Gybbon, Cons. Min. and Met. Engr., 45 Broadway, New York, N. Y. '73
*Spilsbury, Persifor G., Genl. Mgr., Aguacate Gold Mining Co., San Mateo, Costa Rica, C. A. '06
*Sprague, Timothy W., Cons. Engr.....88 Broad St., Boston, Mass. '04
*Sproat, Amasa D., Chem., Supt., The Fresnillo Mining Co., Fresnillo, Zacatecas, Mexico. '02
**Spurr, J. Edward, Min. Geol.....Bullitt Bldg., Philadelphia, Pa. '01
*Squires, Howard W., Min. Engr., 2007 Ocean View Ave., Los Angeles, Cal. '11
*Stackhouse, Daniel M., Supt., Open Hearth Steel Dept., Cambria Steel Co., Johnstown, Pa. '09
*Stacpoole, Stephen W., Civ. and Min. Engr., 3d Ave. de la Libertad No. 5, Orizaba, Vera Cruz, Mexico. '96
*Stadelmann, G., Cons. Min. Engr., Apartado No. 529, Mexico City, Mexico. '02
*Stafford, C. Edward.....Care Union League Club, Philadelphia, Pa. '74
**Stähler, H., Min. Engr., Bergwerksdirektor, Heinitzgrube, by Beuthen, O. S., Germany. '02

*STAKEL, CHARLES J., Min. Engr., Cleveland Cliffs Iron Co., Ishpeming, Mich. '12
†STALNAKER, RANDOLPH.....Agent B. & O. R.R. Co., Wheeling, W. Va. '95
*STANFORD, H. R., Civ. Engr., Bureau of Yards and Docks, Navy Dept., Washington, D. C. '94
*STANFORD, RICHARD B., Min. Engr. and Geol., 206 Metropolitan Bank Bldg., New Orleans, La. '02
*STANLEY, JAMES, Min. Engr., 147 Holland Rd., Kensington, W., London, England. '98
*STANLEY, ROBERT C., Min. Engr.....9 Phelps Place, New Brighton, N. Y. '02
**STANSFIELD, ALFRED, Prof. of Met., McGill University, Montreal, Canada. '02
*STANSFIELD, HARRY, Min. Engr., Mgr., The Talisman Con., Ltd., Karangohake, Auckland, New Zealand. '05
**STANTON, FRANK McM., Min. Engr.....29 Broadway, New York, N. Y. '89
*STANTON, JOHN R., Copper Mining.....15 William St., New York, N. Y. '99
*STANTON, ROBERT B., Civ., Min. Engr.....32 Nassau St., New York, N.Y. '92
*STANTON, WILLIAM A., Mfr.....811 Trinity Bldg., New York, N. Y. '96
**STARKEY, TOM R.....Care King & Co., Belize, British Honduras, C. A. '07
*STARKWEATHER, HERBERT, Min. Engr., 330 East Eaton Ave., Cripple Creek, Colo. '94
*STARR, CHARLES C., Min. Engr.....Fairview, Nev. '05
**STAUNTON, WILLIAM F., Min. Engr., 512 So. Harvard Blvd., Los Angeles, Cal. '83
*STAVER, WILLIAM H., Min. Engr., Supt., Liberty Bell G. M. Co., Telluride, Colo. '02
Stead, John E.....11 Queens Terrace, Middlesbrough, England.
*STEARNS, IRVING A.....60 S. River St., Wilkes-Barre, Pa. '71
*STEARNS, THOMAS B., Min. and Mech. Engr.....Denver, Colo. '89
*STEBBINS, ELWYN W., Cons. Min. Engr., 819 Mills Bldg., San Francisco, Cal. '03
*STEEL, ALVIN A.....Parma, Idaho. '03
*STEEL, DONALD, Min. Engr., Geol.....1423 Donnelson Ave., Oroville, Cal. '09
*STEEL, HENRY, Steel Mfr., Phœnix Steel Works.....Rotherham, England. '05
*STEHLI, HENRY J., Min. Engr., Room 1835, 25 Broad St., New York, N. Y. '07
*STEIGER, GEORGE, Chem.....U. S. Geological Survey, Washington, D. C. '95
*STEIN, WALTER M., Met. Engr., Prest., Primos Chem. Co., Inc., Primos, Pa. '88
*STENGER, EDWARD L., Testing Engr., Mountain Copper Co., Keswick, Shasta Co., Cal. '09
*STEPHEN, ALFRED E., "Rydal Mount," Webbs Ave., Ashfield, Sydney, New South Wales, Australia. '02
*STEPHEN, WALTER M., Min. Engr.....726 New York Blk., Seattle, Wash. '12
*STEPHENSON, GRANT T., Civ. Engr., Genl. Supt., Mashek Chemical & Iron Co., Wells, Mich. '08
*STERLING, PAUL, Mech. Engr., Lehigh Valley Coal Co., Wilkes-Barre, Pa. '11
*STERLING, ROBERT, Bunker Hill & Sullivan Min. & Conc. Co., Kellogg, Idaho. '02
†STERNFELD, THEODORE, Treas., Am. Metal Co., Ltd., 52 Broadway, New York, N. Y. '10
*STERRETT, DOUGLAS B., Geol., U. S. Geological Survey, Washington, D. C. '08
*STEVENS, ARTHUR W., Min. Engr.....Atlanta, Idaho. '11
*STEVENS, BLAMEY, Min. Engr.....Penticton, B. C., Canada. '05
*STEVENS, J. VENN, Smelter Chem., Central Chile Copper Co., Panulcillo, Coquimbo, Chile, So. America. '13

*Stevens, Morton, Pullman & Stevens, Penna. Bldg., 15th and Chestnut Sts., Philadelphia, Pa. '07
*Stevenson, A. A., Standard Steel Works Co., Morris Bldg., Philadelphia, Pa. '89
*Stevenson, George E., Civ. and Min. Engr., Stevenson & Knight, Connell Bldg., Scranton, Pa. '11
*Stevenson, John, Jr. ..... Sharon, Pa. '76
*Stevenson, Maxwell, Jr., Mining, 507 Land Title Bldg., Philadelphia, Pa. '10
**Stewart, Alexander, Civ. and Min. Engr., Salisbury House, London Wall, London, E. C., England. '96
*Stewart, Arthur J., Min. Engr. ..... Cottage Grove, Ore. '00
*Stewart, Charles A., Instructor in Geol., Univ. of Idaho, Moscow, Idaho. '10
*Stewart, Howard R., 5 Rodway Rd., Roehampton, London, S. W., Eng. '97
*Stewart, Jesse A., Min. Engr., Elba Mine ..... McKinley, Minn. '09
*Stewart, John B., Min., Met. Engr. ..... Millersville, Lancaster Co., Pa. '04
*Stewart, P. Charteris A., Geol., 51 Redcliffe Sq., London, S. W., Eng. '01
*Stewart, Robert B., Demonstrator in Met., Univ. of Toronto, 175 McCaul St., Toronto, Ont., Canada. '10
*Stewart, Robert H., Min. Engr. ..... Trail, B. C., Canada. '05
*Sticht, Robert C., Genl. Mgr., Mt. Lyell Mining & Railway Co., Ltd., Queenstown, Tasmania. '85
*Stickney, Alfred W., Geol., Kyshtim Mining Wks., Ltd., Kyshtim, Govt. of Perm, Russia. '10
*Stiles, Thomas W., University Club, 5th Ave. and 54th St., New York, N. Y. '99
*Stillman, Charles A., Secy. and Treas., Iroquois Iron Co., So. Chicago, Ill. '12
†Stillman, James S., Secy. and Treas., Empire Steel & Iron Co., Catasauqua, Pa. '12
*Stines, Norman C., Min. Engr., Polefskoy Zavod, Mramorskaya Station, Perm Railroad, Russia. '06
*Stockdale, Arthur H., Mgr., Cia. Minera y Beneficiadora de "Maravillas y San Francisco," Apartado 21, Pachuca, Hid., Mexico. '06
*Stockett, Capt. Alfred W., P. O. Box 5393, Johannesburg, Transvaal, So. Africa. '99
*Stockett, Lewis, Department Natural Resources, Canadian Pacific Ry., Calgary, Alta., Canada. '81
*Stockton, Robert S., Supt., Operation and Maintenance of Western Section of Irrigation Block, Canadian Pacific Ry. Co., Strathmore, Alta., Canada. '03
**Stoddart, A. W., Min. Engr. ..... Address wanted. '97
*Stoek, Harry H., Prof. of Min. Engrg. ..... Univ. of Illinois, Urbana, Ill. '88
*Stoeffel, Paul X., Min. Engr., Apartado 112, Gomez Palacio, Dur., Mexico. '07
†Stoiber-Rood, Mrs. Lena A., Mine Mgr., "Stöiberhoff," 1022 Humboldt St., Denver, Colo. '94
*Stoltz, Guy C., Min. Engr., Genl. Supt., Witherbee, Sherman & Co., Inc., Mineville, N. Y. '09
*Stone, George C., Chief Engr., New Jersey Zinc Co., 55 Wall St., New York, N. Y. '80
**Stonestreet, George D., Cons. Min. and Met. Engr., Haileybury, Ont., Canada. '88

*STORROW, SAMUEL, Civ. and Min. Engr., Wright & Callender Bldg., Los Angeles, Cal. '99
*STORRS, ARTHUR H., Cons. Engr.....704 Connell Bldg., Scranton, Pa. '11
*STORRS, LUCIUS S., Geol., Vice-Prest., The Connecticut Co., New Haven, Conn. '00
*STOUGHTON, BRADLEY, Secretary, American Institute of Mining Engineers, 29 W. 39th St., New York, N. Y. '97
**STOUTZ, EDMOND DE..... .....Singapore, Straits Settlements. '00
*STOW, AUDLEY H., Cons. Civ. and Min. Engr.....Pocahontas, Va. '94
*STOW, HARRY P., Mine Owner and Mgr., 1617 Central Ave., Alameda, Cal. '04
*STRAP, GASTON, Dir. des Mines de la Bellière, Saint Pierre Montlimart, par Montrevault, Maine-et-Loire, France. '05
*STRASSER, WILLIAM F., Min. Engr.....Hazel Green, Wis. '05
*STRATTON, WILLIAM C., Min. Engr..... Kromer House, Scottdale, Pa. '09
*STRAUSS, LESTER W., Min. Engr.....Apartado 1227, Lima, Peru, S. A. '00
*STRAW, CHARLES A., Mech. Engr.....218 Warren St, Hudson, N. Y. '04
*STREET, GERALD B., Mine and Mech. Engr., Dev. Dept., Dupont Powder Co., Wilmington, Del. '02
*STRIEBY, WILLIAM, Prof. Min., 805 N. Cascade Ave., Colorado Springs, Colo. '77
*STRINGHAM, JOSEPH S., Mech. Engr., 800 Union Trust Bldg., Detroit, Mich. '09
*STROBEL, VICTOR O., Genl. Mgr., Crane Dept., Niles-Bement-Pond Co., Philadelphia, Pa. '84
*STROHECKER, JOHN W., Min. Engr.....1301 N. 20th St., Boise, Idaho. '12
*STRONG, ARCHIBALD McC., Min. and Civ. Engr., 530 Union Oil Bldg., Los Angeles, Cal. '09
*STRUTHERS, JOSEPH, Treas., United Engineering Society, 29 West 39th St., New York, N. Y. '88
*STUBBS, GEORGE W., Mining.....1216 Nicholas Bldg., Toledo, Ohio. '08
*STUCKEY, LEONARD C., Min. Engr., Taquah Min. & Exploration Co, Ltd., Tarquah, Secondee, West Africa. '06
*STULL, JOHN W., Mine Supt.....Lignite, Va. '05
*STURGES, CLARENCE B., Coal Operator.....Southport, Conn. '05
*STURGES, HAROLD.....Oaxaca, Oax., Mexico. '06
*STURGIS, EDWARD B., Min. Engr.....Pleasantville Sta., N. Y. '99
*SUGIMOTO, ISUDZ, Min. Engr. and Met., Imperial Bureau of Mines, Dept. of Agri. and Com., Tokyo, Japan. '10
*SULLIGER, ROY A., Min. Engr., 1400 Union Trust Bldg., Los Angeles, Cal. '10
*SULLIVAN, ALAN, Chief Engr., The Gutta Percha and Rubber Mnfg. Co. of Toronto, Ltd., Toronto, Ontario, Canada. '02
*SULLY, JOHN M., Min. Engr..... Santa Rita, N. M. '06
*SULTAN, WILLIAM S., Min. Engr.....Globe, Ariz. '07
*SUMMERHAYES, MAURICE W.....76 Home Life Bldg., Toronto, Ont., Can. '06
*SUSSMANN, DR. OTTO, Min. Engr., Metallurgical Co. of America, 52 Broadway, New York, N. Y. '04
**SUTHERLAND, J. W., Genl. Mgr., Golden Horseshoe Est. Co., Ltd., Boulder, Western Australia. '92
*SUTTON, WILLIAM J., Geol.....749 Discovery St., Victoria, B. C., Canada. '00
*SWAIN, HENRY L., Min. Engr., Mgr., Pacific Copper Co., Avenida Cinco de Mayo, No. 1, Mexico City, Mexico. '06
Swank, James M. (Associate)..... ....261 S. 4th St., Philadelphia, Pa.
*SWANQUIST, GUSTAVUS A., Engr., Butters Divisadero Co., Divisadero, S vador, C. A. '04

*Swart, Walter G., Min. and Met. Engr., 1118 Foster Bldg., Denver, Colo. '99
*Swartley, Arthur M., Min. Engr.....8th and Tyler Sts., Corvallis, Ore. '10
*Swartz, Charles C., Min. Engr.....South Norwalk, Conn. '08
*Sweet, Henry N.....63 Mt. Vernon St., Boston, Mass. '91
*Sweetser, Arthur L., Min. Engr., N. Y. & Honduras Mining Co.,
Rosario, Honduras, C. A. '06
*Sweetser, Ralph H., Supt., Columbus Iron & Steel Co....Columbus, Ohio. '94
*Swift, George D., Mine Supt.....2320 E. 1st St., Duluth, Minn. '93
*Symmes, Oliver R., Min. Engr.....1615 Wall St., Joplin, Mo. '00
*Symmes, Whitman, Mine Mgr.....Virginia City, Nev. '10
*Symons, Arthur, Min. Engr.....Box 469, Johannesburg, Transvaal, S. A. '03

**Taber, Stephen, Geol.....University of South Carolina, Columbia, S. C. '10
*Taft, Thomas K., Min. Engr., Asst. Mill Supt., Liberty Bell G. M. Co.,
P. O. Box 483, Telluride, Colo. '10
*Tainter, F. S., Cons. Engr .....55 Wall St., New York, N. Y. '11
*Takagi, Küchiro, Genl. Mgr., The Tagawa Collieries,
Mitsui Mining Co., Buzen, Japan. '05
*Takeda, Kyosaku.....31 Obancho Yotsuyaku, Tokyo, Japan. '97
*Takenouchi, Korehiko, Genl. Mgr., Hitachi Mine, Prov. Hitachi, Japan. '11
*Talcott, Morris G., Min. Engr., Care General Assets, Ltd.,
Dominion Bond Bldg., Toronto, Ont., Canada. '06
*Tarwater, Polk, Genl. Mgr., Ore Mines, Brown Mining Co., Cardiff, Tenn. '00
*Tate, E. L., Mining,.....P. O. Box 384, Spokane, Wash. '12
**Tatton, Edwin H., Mgr., Cia. Minera y Agricola Oploca de Bolivia,
Chocaya, Bolivia, So. America, via Mollendo y La Paz y Uyuni. '13
**Taylor, Albert W., Genl. Mgr., Korean Exploration Co.,
Chiksan Mine, Chiksan, Korea. '00
*Taylor, Edward J., Civ. and Min. Engr...229 N. Craig St., Pittsburg, Pa. '05
**Taylor, Frank M., Prest., Taylor and Brunton Ore Sampling Co.,
730 Symes Bldg., Denver, Colo. '01
*Taylor, Henry B., Min. Engr.....Dollar Bay, Mich. '08
**Taylor, James, Cons. Engr., Chem., "Betys," Montague Rd.,
Neutral Bay, Sydney, N. S. W., Australia. '98
*Taylor, Joseph J., Min. Engr., San Francisco Chem. Co.,
P. O. Box 87, Montpelier, Idaho. '90
*Taylor, Knox, Genl. Mgr., Taylor Iron & Steel Co.....High Bridge, N. J. '97
**Taylor, Lewis H., Jr., Mining.....Land Title Bldg., Philadelphia, Pa. '99
*Taylor, Samuel A., Cons. Civ., Min. Engr., Lewis Block, Pittsburg, Pa. '05
*Taylor, William H., Mgr. and Prest., Anthracite Coal Companies,
2725 Whitehall Bldg., New York, N. Y. '87
*Taylor, William W., Vice-Prest. and Genl. Mgr.,
Oriskany Ore & Iron Corpn., Lynchburg, Va. '97
*Tays, Eugene A. H., Civ., Min. Engr., San Blas, Distrito de
Fuerte, Sinaloa, Mexico, via Nogales, Ariz. '98
**Teale, Joseph W., Min. Engr., Bainbridge, Seymour & Co.,
352-55 Salisbury House, London Wall, London, E. C., England. '03
*Tefft, L. J.....Care O. A. Olsson, Wallace, Idaho. '05
*Temby, William T., Min. Engr., Langlaagte Est. Gold Mining Co.,
P. O. Box 98, Johannesburg, Transvaal, So. Africa. '03
*Textor, Oscar, Anal. Chem...603 Superior Ave, N. W., Cleveland, Ohio. '06
**Thacher, Arthur, Min. Engr.....Roe Bldg., St. Louis, Mo. '75

**Thacher, William A.....Lake City, Hinsdale Co., Colo. '90
*Thackray, George E., Structural Engr.,Cambria Steel Co., Johnstown, Pa. '80
*Thame, James, Cons. Min. and Mech. Engr.,
The Maisonette, Derby Rd., Sheen, Surrey, England. '10
*Thane, Bartlett L., Min. Engr., Supt., Eagle River Mining Co.,
Juneau, Alaska. '01
*Thayer, Benjamin B., Prest., Anaconda Copper Mining Co.,
42 Broadway, New York, N. Y. '87
*Thayer, Harry S., Mgr. Gladstone Reduction Co.....Silver Cliff, Colo. '10
*Thayer, Reginald H., Min. Engr...12 Windsor Terrace, Yonkers, N.Y. '11
**Thies, Adolf.....R. F. D. No. 1, Box 20, Charlotte, N. C. '78
*Thomae, W. F. A., Min. Engr., Mazapil Copper Co.,
Apartado 64, Saltillo, Coah., Mexico. '93
*Thomas, Albert E., Min. Engr., Bassett Road Villas,
Camborne, Cornwall, England. '97
*Thomas, Bruno, Cons. Engr.....P. O. Box 1361, Seattle, Wash. '10
*Thomas, Charles S., Jr., Min. Engr.....730 Symes Bldg., Denver, Colo. '11
*Thomas, Chester A., Min. Engr., Resident Mgr., Yukon Gold Co.,
Dawson, Yukon Territory, Canada. '02
*Thomas, David R., Civ., Min. Engr., Mgr., Pridilecta Min. Co.,
Guanacevi, Dur., Mexico. '04
*Thomas, Edmund, Supt. Weaver Mine.....Gibson, N. M. '11
*Thomas, Edward G.....700 Union Oil Bldg., Los Angeles, Cal. '02
*Thomas, Edwin..... .....Catasauqua, Pa. '79
*Thomas, Frederick F.....2719 Dwight Way, Berkeley, Cal. '84
*Thomas, George, 3d.....Treas., Parkesburg Iron Co., Parkesburg, Pa. '95
*Thomas, Henry T., Met., Reduction Officer and Chem.,
Champion Reefs, Mysore State, South India. '05
*Thomas, Hubert S., Tinplate Mfr.,
"Hillside," Penylan, Cardiff, Wales, G. B. '06
*Thomas, James E., Reduction Officer, Simmer Deep, Ltd.,
P. O. Box 178, Germiston, Transvaal, South Africa. '06
†Thomas, John F., Asst. Field Engr., Carnegie Steel Co.,
15 Logan Ave., Sharon, Pa. '08
*Thomas, John W., Furnace Supt..... Saxton, Pa. '06
*Thomas, Kirby, Min. Engr., Room 1017, 20 Broad St., New York, N. Y. '04
*Thomas, Marion L., Min. Engr.....Manzanillo, Colima, Mexico. '05
*Thomas, Perry C., Min. Engr.....Macdonald, W. Va. '12
*Thomas, T. Lewis, General Smelting Co...Bullitt Bldg., Philadelphia, Pa. '99
*Thomas, William S., Care D. M. Thomas.....Bevier, Mo. '96
*Thomlinson, William, Dir., Seaton Carew Iron Works,
West Hartlepool, England. '81
*Thompson, Capt. C. Henry, Prest., Dahlgren Copper Mining Co.,
1127 W. 27th St., Los Angeles, Cal. '00
*Thompson, Charles D., Min. Engr., Care Bingham-New Haven
Mining Co., Bingham Canyon, Utah. '09
*Thompson, Charles H., Mine Mgr.....Darbyville, Lee Co., Va. '11
*Thompson, Frank E., Supt., Cambria Steel Co..... .....Johnstown, Pa. '12
*Thompson, James S.,Supt.,1st Div.,Colorado Fuel & Iron Co.,Trinidad,Colo. '08
†Thompson, Lavington G., M.D.....Launceston, Tasmania. '03
*Thompson, Malcolm M., Min. Engr., Duncan, Fox & Co.,
Antofagasta, Chile, So. America. '10

*Thompson, Robert M., Chairman, Board of Directors,
International Nickel Co., 43 Exchange Place, New York, N. Y. '81
**Thompson, William, Cons. Engr., 84 Regents Park Road,
London, N. W., England. '99
*Thompson, William, Care Veta Colorado M. & S. Co., Parral, Chih., Mex. '00
*Thoms, Clifford C., Min. Engr.....Rialto, Cal. '03
*Thomson, Edward, Chem., Engr.....Hostotipaquillo, Jalisco, Mexico. '03
*Thomson, Francis A., Prof. Min., Met., Wash. State College,
302 Oak St., Pullman, Wash. '02
*Thomson, Henry N., Met., International Smltg. & Refg. Co., Tooele, Utah. '07
*Thomson, John, Civ. Engr.....253 Broadway, New York, N. Y. '03
*Thomson, Robert W., Min. Engr.,
1261 Granville St., Vancouver, B. C., Canada. '07
*Thomson, Samuel C., Cons. Engr., S. Neumann & Co., P. O. Box 485,
Johannesburg, Transvaal, So. Africa. '98
*Thorn, Joseph F.....Goldfield Cons. Mines Co., Goldfield, Nev. '06
*Thorne, B. Leonard, Min. Engr.....Hosmer, B. C., Canada. '07
*Thorne, William E., Min. Engr.,
408 Salisbury House, London, E. C., England. '01
*Thornton, Edward T., Min. Engr.....Superior, Ariz. '05
†Thornton, William D.....42 Broadway, New York, N. Y. '96
*Throckmorton, Howard W., Min. and Petroleum Engr.,
Trust & Savings Bldg., Los Angeles, Cal. '03
*Thropp, Joseph E., Jr.....3318 Aldis Ave., Indiana Harbor, Ind. '96
*Thurston, E. Coppee, Min. Engr., A. Goerz & Co., Pinners Hall,
Austin Friars, London, E. C., England. '96
*Tibby, Benjamin F., Min. Engr...Newhouse Bldg., Salt Lake City, Utah. '08
*Tiernan, Austin K., Min. Engr....University Club, Salt Lake City, Utah. '03
*Tierney, John J.....Prest., Pocahontas Co., Elkhorn, W. Va. '83
*Tierney, L. E., Genl. Mgr., Powhatan, Lynchburg, Elk Ridge &
Eureka Coal & Coke Co., Powhatan, McDowell Co., W. Va. '89
*Tillberg, Erik W., Min. Engr.....Westervik, Sweden. '02
*Tillson, Benjamin F., Min. Engr., N. J. Zinc Co., Franklin Furnace, N.J. '05
**Tilly, Alfred, Min. Engr., Supt., Frontino Bolivia Gold Mining
Co., Ltd., Puerto Berrio, Republic of Colombia, So. America. '99
**Timm, John M., Min. Engr.....Metzerstrasse 53, Bâle, Switzerland. '96
*Timmons, Colin, Min. Engr.....4819 Budlong Ave., Los Angeles, Cal. '06
*Tinsley, Robert B., Engr. in charge of Miraflores Locks and Dams,
Corozal, Canal Zone. '12
**Titcomb, Harold Abbot, Min. Engr.,
Salisbury House, London, E. C., England. '99
*Titsworth, Frederick S., Min. Engr., Atty.,
Care Titsworth & King, 404 Equitable Bldg., Denver, Colo. '00
*Tobey, Horace P., Prest.....Tremont Nail Co., West Wareham, Mass. '89
*Toll, Rensselaer H., Cons. Min. Engr...410 Boston Bldg., Denver, Colo. '02
*Tolman, Cyrus F., Jr.....521 East 3d St., Tucson, Ariz. '06
*Tolman, John D., Jr., Min. Engr.....918 W. 1st St., Los Angeles, Cal. '06
*Tom, Isidore, Min. Engr., African & European Investment Co., Ltd.,
Box 2567, Johannesburg, Transvaal, So. Africa. '04
*Tombo, Carl, Civ. Engr.....509 W. 122d St., New York, N. Y. '06
*Tonkin, James J., Mgr., La Tortilla Lead Smelting Works,
Linares, Provincia de Jaen, Spain. '93

*Tonkin, John, Mine Supt.....Edwards, St. Lawrence Co., N. Y. '03
*Tonkin, Stanley J., Genl. Mgr.....Dow Coal Co., McAlester, Okla. '03
*Tonking, William H., Mine Supt.....Dover, N. J. '96
*Tonnelé, Theodore, Met. Engr.....258 W. 70th St., New York, N. Y. '84
*Torbert, James B., Min. Engr., Tenn. Mt. Coal & Land Co.,
406 James Bldg., Chattanooga, Tenn. '09
*Torres, Frank L.....803 Austin St., El Paso, Texas. '10
**Torrey, Herbert G., Assayer and Met., H. G. Torrey & Co.,
10 Wall St., New York, N. Y. '81
*Touceda, Enrique, Chem. and Met.....Albany, N. Y. '89
*Toulmin, Priestley, Prest. and Genl. Mgr., Lehigh Coal Co., Lehigh, Ala. '88
*Tower, George W., Jr., Geol.....3 Lincoln St., New Rochelle, N. Y. '01
*Tower, Louis L., Min. Engr.....Northport, Wash. '03
*Towne, Robert S., Min. Engr., Prest., Compañia Metalurgica Mexicana,
82 Beaver St., New York, N. Y. '91
*Townsend, Arthur R., Cons. Min. Engr...25 Broad St., New York, N.Y. '01
**Townsend, Harry P., Min. Engr., Village Deep, Ltd.,
Box 1064, Johannesburg, Transvaal, So. Africa. '01
*Townsend, Neville F., B. C. Land Surveyor,
66 Fairfield Bldg., Vancouver, B. C., Canada. '07
*Toy, Francis L., Met.....927 Maryland Ave., Pittsburg, Pa. '12
*Traphagen, Frank W., Prof. of Met. and Assaying,
Colorado School of Mines, Golden, Colo. '99
*Tratman, E. E. Russell, Civ. Engr. and Res. Editor, *Engineering News*,
1144 Monadnock Bldg., Chicago, Ill. '91
*Trauerman, Carl J., Min. Engr., Butte Central Copper Co., Butte, Mont. '12
*Traylor, Samuel W., Mining Machinery, 30 Church St., New York, N.Y. '03
**Treadwell, Erwin D., Mine Mgr.....317 S. Olive St., Los Angeles, Cal. '93
*Treat, F. H., Cons. Engr.....11448 Euclid Ave., Cleveland, Ohio. '86
*Treat, Lloyd B., Min. Engr.....R. F. D. 1, Glastonbury, Conn. '12
*Trenerry, Edward J.....Mine Officer, Moonta Mines, So. Australia. '11
*Trengove, Samuel R., Supt. of Mines, Cons. Arizona Smelting Co.,
Mayer, Ariz. '00
*Trerise, Josiah H., Calaveras Copper Co., Copperopolis, Calaveras Co., Cal. '03
†Trotter, Felix F., Jr., Mining.....Chino Copper Co., Hurley, N. M. '12
*Trotz, J. O. Emanuel, Met.....Svanevik, near Ronneby, Sweden. '88
*Trowbridge, W. Waldo, Mine Mgr.....40 Cross St., West Newton, Mass. '06
†Truax, Sewall.....Care W. C. Egan, Highland Park, Ill. '03
*Trump, Edward N., Mech. and Chem. Engr., Chief Engr. and
Genl. Mgr., Solvay Process Co., Syracuse, N. Y. '96
*Truschkoff, Nicolas, Mgr., Eidertinsky Gold Mines, Russian Gold
Exploration Co., Orsk, Dept. of Orenburg, Russia. '09
*Tryon, Charles T., Min. Engr .....Oceanic Mine, Arivaca, Ariz. '11
Tschernoff, Prof. Dimitry C......25 Rue Pessotchnaya, St. Petersburg, Russia.
*Tse, Tsok Kai, Mining.....Instructed to hold all mail. '09
*Tsujimoto, Kennosuke, Min. Engr., Met.,
Care Fujita-gumi, Dojima, Osaka, Japan. '10
*Tsukakoshi, Umenoshin, Met. Engr., Furukawa Mining Co.,
Yaesu cho, Kojimachi ku, Tokyo, Japan. '10
*Tucker, Albert W., Mgr., Gold Hill Consolidated Co.,
and Cons. Engr., Union Copper Mines Co., Gold Hill, N. C. '00

**Tudor, J. W. ....Care H. D. Tudor, 35 Congress St., Boston, Mass. '98
*Turgeon, Fremont N., Min. Engr., 7 Commonwealth Ave., Gloucester, Mass. '09
*Turner, Albert A., Min. Mgr. .....Beatty, Nev. '09
*Turner, C. Edward, Huelva Copper & Sulphur Mines, Valdelamusa, Huelva, Spain. '08
*Turner, Charles P., Chief Engr., Penna. Steel Co. .....Steelton, Pa. '12
*Turner, George D. B., Cons. Engr., 98 Leadenhall St., London, E. C., England. '99
**Turner, Henry W., Geol., Min. Engr., 708 Mills Building, San Francisco, Cal. '00
*Turner, John K., Min. Engr. .....P. O. Box 763, Goldfield, Nev. '00
*Turner, Nathaniel P., Civ. Engr. ....Hotel Camaguey, Camaguey, Cuba. '08
*Turner, R. Chester .....2511 Bancroft Way, Berkeley, Cal. '95
*Turner, Scott, Min. Engr., Genl. Mgr., Arctic Coal Co., Tromso, Norway. '06
*Turner, William J., Supt., Ingliston Extended Gold Mines, Ltd., Meekatharra, West. Australia. '00
*Turner, William J., Engr., Braden Copper Co., Rancagua, Chile, So. Am. '13
*Turney, Arthur R., Min. Engr., Sea View, St. Mawes, Cornwall, England. '03
*Turrell, Harold, Care Charles Turrell, Royal Societies Club, St. James St., London, S. W., England. '06
*Tuschka, Otto, Assayer and Chem. ....Fundicion No. 2, Monterey, Mexico. '00
*Tuttle, Arthur L., Min. Engr., Genl. Supt., Continental Mining Co., 420 Martin St., San Antonio, Tex. '93
*Tyler, Adin P., Min. Engr. ....Robbinsdale, Minn. '10
*Tyler, Nat., Jr., Prest., Monarch Road Roller Co., 50 Church St., New York, N. Y. '02
*Tyrrell, Joseph B., Min. Engr., Confederation Life Bldg., Toronto, Can. '99
*Tyssowski, John, Mine Mgr. .....Box 37, R. F. D. 4, Washington, D. C. '10

*Uehling, Edward A., Prest., Uehling Instrument Co., 199 Franklin Ave., Passaic, N. J. '86
*Underhill, James, Min. Engr., U. S. Min. Survey., Idaho Springs, Colo. '98
*Underhill, W. A., Mining, Mgr., Grasselli Chem. Co. of Tenn., New Market, Tenn. '09
*Underwood, Arthur J., Min. Engr., San Jose de Gracia, Sinaloa, Mexico. '01
*Underwood, Lawrence H., Supt. of Blast Furn., Riverside Wks., National Tube Co., Wheeling, W. Va. '09
*Unger, J. S. .....Duquesne, Pa. '91
*Upham, W. E. .....Address wanted. '01
*Upton, George B., Min. Engr. .....Ravine Road, Clinton, Iowa. '08
*Uren, William J. .....124 College Ave., Houghton, Mich. '07
*Utley, Howard H., Min. Engr., Supt., Arizona-Parral Mining Co., Apartado 117, Parral, Chih., Mexico. '02

*Vail, Herbert E., Mgr., Lake View & Star, Ltd., Box 88, Fimiston, West. Australia. '05
*Vail, Richard H., Asst. Editor, *Engineering and Mining Journal*, 505 Pearl St., New York, N. Y. '05
†Vaile, Joel F., Lawyer, Wolcott & Vaile, 420 Equitable Bldg., Denver, Colo. '95
*Valentine, Charles F., Cons. Min. Engr., Emuford, Cairns, North Queensland, Australia. '02

*VALENTINE, MALVERN R., Taylor & Brunton Sampling Co., Box 281, Victor, Colo. '03
*VALLAT, BENJAMIN W., Min. Engr., Supt., Newport Mining Co., Ironwood, Mich. '05
*VALUE, BEVERLY R., Empire Engrg. Corp., 6 Church St., New York, N.Y. '03
*VAN ARSDALE, GEORGE D., Chem., Copper Queen Consolidated Mining Co., Douglas, Ariz. '02
*VAN ARSDALE, W. H., Hotel Windermere, Cornell Ave. and 56th St., Chicago, Ill. '72
*VAN BARNEVELD, CHARLES E., Prof. Mining, State University, Minneapolis, Minn. '01
*VAN BRUNT, CHARLES G., Chem., Research Laboratory, General Electric Co., Schenectady, N. Y. '98
*VANDERLIP, WASHINGTON B., Min. Engr.....Fairbanks, Alaska. '08
*VAN DIEST, EDMOND C., Min., Civ. Engr., Box 826, Colorado Springs, Colo. '89
**VAN HISE, CHARLES R., Geol., Prest., Univ. of Wisconsin, Madison, Wis. '00
**VAN HORN, FRANK R., Prof. of Geology and Mineralogy, Case School of Applied Science, Cleveland, Ohio. '11
*VAN ISSCHOT, PIERRE E. C...Casilla 240, Guayaquil, Ecuador, So. America. '96
*VAN LAW, CARLOS W., Mech. Engr., Dir., Cia. Real del Monte y Pachuca, Pachuca, Hidalgo, Mexico. '04
*VAN LIEW, WILLARD R., Genl. Mgr., Caucasus Copper Co., Ltd., Batum, So. Russia. '03
*VAN MATER, JOSEPH A., Cons. Engr.....55 Wall St., New York, N. Y. '93
**VAN NESS, WILLIAM W., Min. Engr.....Address wanted. '97
*VAN ORDEN, FRANK L.....Houghton, Mich. '01
*VAN SICLEN, MATTHEW, Min. Engr., Turtle Creek Siding, Albert Co., N. B., Canada. '12
*VAN VALKENBURG, RALPH D., Mgr., Colonial Steel Co., 620 N. State St., Chicago, Ill. '12
*VAN WINKLE, CHARLES T., Min. Engr., Scott Bldg., Salt Lake City, Utah. '12
*VAN ZWALUWENBURG, A., Met., Fresnillo Mining Co., Fresnillo, Zac., Mexico. '00
**VARDEN, RICHARD A., Cons. Min. Engr., Gt. Perseverance Gold Mine, Kalgoorlie, West. Australia. '87
*VARELA, FRANCISCO R., Min. Engr.....Mazapil, Zacatecas, Mexico. '07
*VAUCLAIN, SAMUEL M., Supt., Baldwin Locomotive Works, 500 N. Broad St., Philadelphia, Pa. '96
*VAUGHAN, RUPERT F., Met., Totak Gold Mining Co., Menado Residency, Celebes, Ned. India. '09
*VAUGHEN, SAMUEL W., Supt. of Furnaces, National Tube Co., 682 14th Ave., Lorain, Ohio. '04
**VEATCH, JOHN A., Min., Hydraulic Engr..... 497 Pine St., Napa, Cal. '01
*VENABLES, HARRY L., Min. Engr.....Oruro, Bolivia, So. America. '08
*VERRILL, CLARENCE S., Cons. Min. Engr., 712 Pacific Bldg., Vancouver, B. C., Canada. '11
*VERSCHOYLE, WILLIAM D., Min. Engr., Genl. Mgr., Port of Bella Coola, Ltd., 617 Pacific Bldg., Vancouver, B. C., Canada. '06
*VIDLER, REES C., Min. Engr.....Golden, Colo. '05
*VIGEON, EDWARD C., Asst. General Mgr., Spassky Copper Mine, Ltd., Karagandy, Akmolinsk District, Siberia. '03
*VIGGERS, WILLIAM, Mech. Engr....Calle Guadalupe 75, Durango, Mexico. '89

*Villadsen, Anders B., Engr. and Contractor,
Care Pingree National Bank, Ogden, Utah. '07
*Villalon, José R., Prof. Civ. and Min. Engrg., University of Havana,
37 Cuba St., Havana, Cuba. '13
*Villarello, Juan D., Chief Geol. of Section of Mines, Instituto
Geologico de Mexico, 5a del Cipres No. 2728, Mexico City, Mexico. '06
*Vincent, Hobart S., Mine Supt.....Deadwood, S. D. '05
*Vinicombe, Robert E. B., Mine Engr.....Address wanted. '08
*Vivian, George G., Met., East Butte Copper Min. Co.....Butte, Mont. '82
*Vivian, Godfrey T., Min. Engr.,
Pengegon House, Camborne, Cornwall, England. '97
*Vivian, Hugh, Met., Vivian & Sons, Hafod Wks., Swansea, Wales, G. B. '08
*Vivian, Joseph C., Min. Engr., Genl. Mgr., Mammoth & Macdonald
Mines, Ltd., Mungana, N. Queensland, Australia. '06
*Vogel, Felix A., Cons. Min. Engr., Genl. Mgr., Florence Iron Co.,
Room 337, 25 Broad St., New York, N. Y. '06
*Vogelsang, Dr. Karl, Min. Engr., General Director,
Mansfeld Copper Co., Eisleben, Germany. '01
†Vogelstein, Ludwig, Metal Merchant.....42 Broadway, New York, N. Y. '06
*Voorheis, Edward C., Mine Mgr...162 Crocker Bldg., San Francisco, Cal. '99

Wada, Prof. Tsunashiro.....36 Sanaw-aka, Ichigaya, Tokyo, Japan.
*Wade, W. Rogers, Min. Engr.....Tyrone, N. M. '10
*Wadleigh, Francis R., Cons. Engr., 1013 Bank of Commerce Bldg.,
Norfolk, Va. '13
*Wadsworth, M. E., Dean, and Prof. of Min., Geol.,
School of Mines, Univ. of Pittsburg, Pittsburg, Pa. '89
*Waeber, Gustavus R., Anal. Chem.....Iron River, Mich. '12
*Wagner, Henry R., American Smelting & Refining Co.,
Apartado 137, Aguascalicentes, Mexico. '02
*Wagner, Percy A., Care De Beers Cons. Mines, Ltd.,
Kimberley, So. Africa. '09
*Wagoner, Luther, Civ., Cons. Engr....850 Union St., San Francisco, Cal. '97
*Wainewright, Wilfrid B., Min. Engr., Union Oil Bldg., Los Angeles, Cal. '08
*Wainwright, William E., Genl. Mgr., Broken Hill South Silver
Mining Co., Broken Hill, South Blocks, New South Wales, Australia. '03
*Wait, Charles E., Prof. of Chem.....Route 15, Knoxville, Tenn. '79
*Waite, Henry M., Chief Engr., Dept. of Public Service, City Hall,
Cincinnati, Ohio. '11
Walcott, Charles D......Smithsonian Institution, Washington, D. C.
*Waldo, Dr. Leonard, Cons. Engr.....49 Wall St., New York, N. Y. '88
*Walker, Arthur L., Prof. Met., School of Mines, Columbia University,
New York, N. Y. '85
*Walker, Elton W., Cons. Min. Engr.,
Supt. Mass Cons. Mining Co., Mass City, Mich. '01
*Walker, Etheredge, Min. Engr., Secy., Boston & Idaho
Gold Dredging Co., Boise, Idaho. '02
**Walker, Myron R., Min. Engr.....P. O. Box 278, La Salle, N. Y. '07
*Walker, Robert T., Genl. Supt., Consolidated Arizona Smelting Co.,
Humboldt, Ariz. '13
*Walker, W. R., Asst. to Prest., U. S. Steel Corpn., 71 Broadway,
New York, N. Y. '81
*Walker, William L.....422 Wells Fargo Bldg., San Francisco, Cal. '09

*WALL, ENOS A., Min. and Met., Vice-Prest., Utah Copper Co., 320 D. F. Walker Bldg., Salt Lake City, Utah. '87
*WALLACE, ROBERT, Min. Engr.....Newton, Mass. '07
**WALLER, DR. ELWYN, Anal. Cons. Chem., Waller & Renaud, 159 Front St., New York, N. Y. '83
*WALLIN, GUSTAF, Min. Engr., Mgr., Luossavaara-Kiirunavaara Co., Malmberget, Sweden. '02
*WALLIS, H. BOYD, Min. Engr., Met., 48 Holland Park W., London, W., England. '04
*WALLIS, PHILIP.....Hotel Roanoke, Roanoke, Va. '84
*WALLOWER, FRANK C., Mine Operator.....Webb City, Mo. '12
†WALSH, EDWARD J., Glass Mfr.....Mississippi Glass Co., St. Louis, Mo. '05
*WALTER, BRUCE.....6823 Thomas Blvd., Pittsburg, Pa. '05
*WALTER, E. W., Min. Engr. and Met..... .....Silverton, Colo '93
*WANG, CHUNG YU, Geol. and Min. Engr., Mgr. Dir. Pao Tai Min. & Smelt. Co., Wuchow, Quangsi, China. '05
*WANG, YINCHANG T., Geol., Hartley Hall, Columbia University, New York, N. Y. '13
*WANLESS, MARK W., Assayer, Chem., Box 20, Hermosillo, Sonora, Mexico. '05
**WARD, OSMER B., Met., Broken Hill Prop. Block 10 Co., Broken Hill, N. S. W., Australia. '98
*WARD, WILLARD P., Min. Engr., Mills Bldg., 15 Broad St., New York, N. Y. '71
*WARD, WILLIAM F., Min. Engr., 416 Ernest & Cranmer Bldg., Denver, Colo. '03
*WARDEN, BRUCE R., Civ., Min. Engr., Anderson, Warden & Wilkin, Vancouver Block, Vancouver, B. C., Canada. '02
*WARN, JOHN E., Mine Supt.....Bermagui, N. S. W., Australia. '05
*WARNE, HERBERT H., Min. Engr., Calle Privada del Alamo 23, Mexico City, Mexico. '89
*WARNER, JULIUS H., Min. Geol., Pittsburgh & Montana Copper Co., Butte, Mont. '07
†WARNER, ROBERT K., Student, P. O. Box 881, Yale Sta., New Haven, Conn. '13
*WARNER, THOR, Mine Mgr.....Hotel Golden, Reno, Nev. '10
**WARREN, FRANK M., Mining, 3443 So. Irving Ave., Minneapolis, Minn. '10
**WARREN, GEORGE H., Explorer and Developer of Mineral Lands, 3443 So. Irving Ave., Minneapolis, Minn. '09
*WARREN, OSCAR B., Min. Engr.....Hibbing, Minn. '11
*WARRINER, RUEL C., Genl. Mgr., Crown Mines, Ltd., Box 102, Johannesburg, Transvaal, So. Africa. '03
*WARRINER, SAMUEL D., Genl. Mgr., Lehigh Coal & Nav. Co., 437 Chestnut St., Philadelphia, Pa. '91
*WARTENWEILER, FRED., Met., P. O. Box 2476, Johannesburg, Transvaal, So. Africa. '03
*WASH, EDWIN R., Chief Engr., Mascot Copper Co.....Des Cabezas, Ariz. '08
*WASHBURNE, CHESTER W., Geol., Poste Restante, Buenos Ayres, Argentine Republic, So. Am. '09
*WASHINGTON, HENRY S., Min. Engr., Cons. Geol., Washington & Lewis, 149 Broadway, New York, N. Y. '07
*WASTE, HARRY L.....Mgr., Midas Gold Mining Co., Knob, Cal. '05
**WATANABE, WATARU, Prof. of Min. and Met., Imperial University of Tokyo, 24 Hayashi-cho, Honyo, Tokyo, Japan. '12
**WATERS, ALBERT L., Mine Engr.....717 N. 6th Ave., Tucson, Ariz. '93
*WATKINS, A. OCTAVIUS, Assayer, Royal Mint.....Perth, W. Australia. '98

*Watkins, Thomas H.....17 Battery Place, New York, N. Y. '04
†Watson, Frank W., Min. Engr.,
Care J. F. & F. W. Watson, 1215 Wilcox Bldg., Portland, Ore. '03
*Watson, Ralph W., Min. Engr.....Address wanted. '10
*Watson, Robert W., Mining.....14 Wall St., New York, N. Y. '00
*Watson, Rolla B., Cons. Min. Engr., Genl. Mgr., Nipissing
Mining Co., Ltd., Cobalt, Ont., Canada. '95
*Watson, Thomas L., Prof. Econ. Geol., Univ. of Va., Charlottesville, Va. '01
*Watson, William J., Smelter Mgr., Care Tyee Copper Co.,
Ladysmith, B. C., Canada. '08
*Watson, Winfield S.....1215 Miss. Ave., Memphis, Tenn. '01
*Watters, Daniel M., Cons. Engr., Seattle Engineering Co.,
2557 Eleventh Ave. W., Seattle, Wash. '04
*Watts, William L., Min. Engr., Chem. and Assayer,
803 N. Bonnie Brae St., Los Angeles, Cal. '97
*Waugh, Percival B., Min. Engr., Birichi Tin Co., Ltd.,
Naragata, No. Nigeria, West Africa. '90
**Way, Edward John, Cons. Engr., Anglo-French Exploration Co., Ltd.,
P. O. Box 2927, Johannesburg, Transvaal, So. Africa. '02
*Way, Karl M., Min. Engr.....Care Crowell & Murray, Marquette, Mich. '10
*Wayland, Russell G., Mine Surveyor.....Treadwell, Alaska. '07
†Wayne, Frederick S., Eastern Mgr., *Mining and Scientific Press*,
29 Broadway, New York, N. Y. '13
*Wearne, William, Min. Supt..... Inland Steel Co., Hibbing, Minn. '09
*Weatherby, William J., Min. Engr.....Alma, N. M. '02
**Webb, Harry H., Cons. Engr., Consolidated Gold Fields of
South Africa, Ltd., 8 Old Jewry, London, E. C., England. '85
*Webb, W. Morton, Min. Engr.....Box 5, Kingsville, Ont., Canada. '00
*Webber, George E.....Ross, Marin Co., Cal. '06
*Webster, Clement L., Geol. and Min. Engr.,
111 Hawkins Ave., Charles City, Iowa. '07
*Webster, Erastus H.....Address wanted. '04
*Webster, Hosea, Mgr., New York Sales Dept., Babcock & Wilcox Co.,
85 Liberty St., New York, N. Y. '95
*Webster, Paul W., Min. Engr.,
Lutz-Webster Engrg. Co., 3103 Grays Ferry Rd., Philadelphia, Pa. '98
**Webster, William R., Cons. and Insp. Engr.,
411 Walnut St., Philadelphia, Pa. '92
*Weck, Charles A., Min. Engr.....Bluestone M. & S. Co., Mason, Nev. '97
*Weddle, Joseph H.....100 William St., New York, N. Y. '97
*Wedge, Utley, Engr., Sulphuric Acid Expert.....Ardmore, Pa. '02
*Weed, Walter H., Geol. and Min. Engr.,
Room 1725, 42 Broadway, New York, N. Y. '98
*Weekes, Frederic R., Min. Engr.....71 Broadway, New York, N. Y. '07
*Weeks, Walter S., Teacher of Min. and Met.,
5 Gray's Hall, Cambridge, Mass. '09
**Weigall, Arthur R., Care Commercial Banking Co. of Sydney,
Birchin Lane, Lombard St., London, E. C., England. '98
*Weigall, Henry S., Min. Engr., Genl. Mgr., Kapsan Mining Concessions,
Doten, Korea. '12
*Weimer, Asa A., Chief Engr...Weimer Machine Works Co., Lebanon, Pa. '85
†Weimer, Edgar A., Min. Engr., Designer and Builder of Blast Furnace
Equipments, Edgar A. Weimer Engineering Works, Lebanon, Pa. '97

**WEINBERG, E. A., Min. and Met. Engr., Care C. W. Moore, 5 London Wall Bldgs., London, E. C., England. '94
*WEIR, CHARLES G., Mining.....21 E. 82d St., New York, N. Y. '95
*WEIR, GEORGE, Care North Broken Hill Silver Min. Co., Broken Hill, N. S. W., Australia. '00
*WEIR, THOMAS, Min. Engr., Mine Mgr., Room 309, Dooly Block, Salt Lake City, Utah. '90
*WEISKOPF, DR. ALOIS, Met. Engr., Goetlinger-Chaussee 18, Hanover, Linden, Germany. '08
*WELD, C. MINOT, Min. Engr.... .....Low Moor, Va. '01
*WELHAVEN, ALF., Genl. Mgr., Oriental Consolidated Mining Co., Pukchin, Unsan, Korea. '07
*WELLES, THEODORE L., Cons. Engr..... Coal Exchange, Wilkes-Barre, Pa. '05
**WELLMAN, SAMUEL T.....8803 Euclid Ave., Cleveland, Ohio. '75
*WELLS, BULKLEY.....Telluride, Colo. '03
*WELLS, FRANK B., Min. Engr., Midas G. M. Co.....Knob, Cal. '03
*WELLS, HORACE L., Prof. Chem. and Met., Sheffield Scientific School, New Haven, Conn. '95
*WELLS, JAMES S. C., Min. Engr. and Met..... .....Canon City, Colo. '08
*WELSH, HAROLD L., Asst. Testing Engr., Washoe Smelter, Anaconda, Mont. '13
*WELSH, NORVAL J. E., Min. Engr., Genl. Supt, Jarilla Copper Synd., Inc., Orogrande, N. M. '02
*WENDEL, CHARLES DE, Engr.....56 Ave. Hoche, Paris, France. '00
*WENDLER, HERMAN, Min. Engr., Apartado 87, Hermosillo, Sonora, Mexico. '05
*WENIGER, RUDOLF, Min. Engr., Genl. Supt., Compañia Minera de Peñoles, Ojuela, Durango, Mexico. '04
*WENSTROM, OLOF, Min. Engr.....53 State St., Boston, Mass. '88
*WENTWORTH, D'ARCY, Met., Hampden Copper Mine, Cloncurry, Queensland, Australia. '03
*WENTWORTH, HENRY A., Mgr., Huff Electrostatic Separator Co., 60 India St., Boston, Mass. '11
*WENTWORTH, IRVING H., Engr., Minas Santa Maria de la Paz, Matehuala, S. L. P., Mexico. '06
*WENTZ, JOHN S., Coal Operator, 1723 Land Title Bldg., Philadelphia, Pa. '02
*WEPFER, G. W., Cons. Mech. and Min. Engr., 1833 Cedar St., Berkeley, Cal. '99
*WESCOTT, WILLIAM P., Mng. Dir., Galena Signal Oil Co., Broadway Court, Broadway, Westminster, London, S. W., England. '10
*WESLEY, WILLIAM H., JR., Asst. Met., Mt. Lyell Min. & Ry. Co., Queenstown, Tasmania. '01
*WEST, HAARLEM E.....Care Barclay & Co., Hayle, Cornwall, England. '00
*WESTCOTT, LEWIS A., Min. Engr., Many Peaks Mine, Many Peaks, Queensland, Australia. '09
*WESTERN, CHARLES R., Mng. Dir., Bower, Scott & Western, Ltd., Broadway Chambers, Westminster, London, England. '92
**WESTERVELT, WILLIAM Y., Cons. Min. Engr., 17 Madison Sq. E., New York, N. Y. '95
*WESTINGHOUSE, GEORGE, Mech. Engr..... ..... Pittsburg, Pa. '86
†WESTLAKE, EMORY H., 2d Vice Prest., Tennessee Copper Co., 11 Broadway, New York, N. Y. '12
*WETHEY, A. H..... .....40 W. 59th St., New York, N. Y. '90
*WHEELER, ARCHER E., Supt., Reduction Works, B. & M. Dept., Anaconda Copper Mining Co., Great Falls, Mont. '99

**Wheeler, Herbert A., Cons. Min. Engr....510 Pine St., St. Louis, Mo. '81
*Wheeler, Shelton King, Assayer and Min. Engr.,
R. F. D. 2, Box 114, Billings, Mont. '02
*Wheelock, Raymond P., Min. Engr., Enterprise Mine, P. O. Box 125,
Kingman, Ariz. '04
*Wheelwright, Orville W., Geol.....Florence, Wis. '12
*Wheler, Aubrey S.....P. O. Box 48, Salisbury, Rhodesia, So. Africa. '04
*Wherry, Henry P., Mill Supt., Perigina Min. & Mill. Co.,
Apartado 25, Guanajuato, Mexico. '07
*Whildin, William G., Div. Supt., Lehigh Coal & Nav. Co., Lansford, Pa. '08
*Whinery, S., Cons. Civ. Engr.....95 Liberty St., New York, N. Y. '80
*Whipple, James Ray, Civ. Engr.....Juneau, Alaska. '05
*Whitaker, De Berniere, Vice-Prest. and Genl. Mgr., Juragua Iron Co.,
Santiago-de-Cuba, Cuba. '99
*Whitaker, Orville R., Min. Engr....932 Equitable Bldg., Denver, Colo. '99
*Whitaker, William L., Mgr., Oklahoma Portland Cement Co., Ada, Okla. '03
*Whitcomb, George D., Prest.....G. D. Whitcomb Co., Rochelle, Ill. '88
*White, Charles H., Asst. Prof. of Min. and Met., Harvard University,
Rotch Bldg., Cambridge, Mass. '01
*White, Edmond A., Min. Engr.....Port Kembla, N. S. W., Australia. '06
*White, Edwin E., Min. Engr., Cleveland Cliffs Iron Co., Ishpeming, Mich. '08
*White, Elijah E., Prest. and Gen. Mgr., E. E. White Coal Co.,
Glen White, W. Va. '12
*White, Joseph E., Min. Engr., Supt., Quartette Mine, Searchlight, Nev. '08
*White, Norman F., Min. Engr.....Mount Morgan, Queensland, Australia. '02
*White, Robeson T., Genl. Mgr. Braden Copper Co , Rancagua, Chile, So. Am. '04
*White, Rush J., Min. Engr., Supt. of Mines, Federal Min. & Smelt. Co.
Wallace, Idaho. '09
*Whitehead, Harry F., Supt., Virginia Iron, Coal & Coke Co., Inman, Va. '11
*Whiteley, James S.....Continental Trust Bldg., Baltimore, Md. '92
*Whitfeld, Hubert E., Min. Engr., University of Western Australia,
Perth, Western Australia. '05
*Whiting, Lowe, Supt. of Mines.....Iron River, Mich. '12
*Whitley, C. W., Smelter Mgr., Care American Smelting & Refining Co.,
714 McCornick Bldg., Salt Lake City, Utah. '05
*Whitman, Philip R., Supt., U. S. Treasury Mining Co...Chloride, N. M. '07
*Whitmore, Lawrence H., Cons. and Min. Engr.,
17 Agency Chambers, Bulawayo, Rhodesia, So. Africa. '90
*Whitney, Eli.....800 Whitney Ave., New Haven, Conn. '75
*Whitney, John D., Min. Engr.....Greenville, Cal. '10
*Whitney, Willis R., Director, Research Laboratory,
General Electric Co., Schenectady, N. Y. '02
*Whittier, Charles C., Min. and Civ. Engr., R. W. Hunt & Co.,
2200 Insurance Exchange Bldg., Chicago, Ill. '11
*Whyte, Frederick W. C., Genl. Mgr. Coal Properties of
Amalgamated Copper Co., Anaconda, Mont. '00
*Wiard, Edward S., Min. Engr., Care Wiard & Brown,
417 Boston Bldg., Denver, Colo. '00
*Wickes, George T., Min. Engr.....The Montana Club, Helena, Mont. '76
*Wickes, L. Webster, Min., Met. Engr., 134 Norton Ave., Los Angeles, Cal. '02
*Wickware, Francis G.....35 W. 32d St., New York, N. Y. '07

*Wiel, Samuel C., Attorney-at-law, 626 Merchants Exchange Bldg., San Francisco, Cal. '03
*Wierum, Howard F., Met., Cons. Engr., Tennessee Copper Co., and Lewisohn Bros., 11 Broadway, New York, N. Y. '98
*Wiggin, Albert E., Met. Engr.....520 Maple St., Anaconda, Mont. '12
*Wijkander, Berndt E., Mgr., Bofors Guttsparig Co.....Bofors, Sweden. '05
*Wilbraham, Arthur G. B., 2 Lawrence Pountney Hill, London, E. C., England. '99
*Wilbur, Warren A., Prest., Valley Coal and Coke Co. of W. Va., South Bethlehem, Pa. '92
*Wilcox, George, Civ. Engr.....Fletcher Engrg. Co., Bridgeport, Conn. '05
*Wilde, Thomas B., Cons. Min. Engr., Prest., Modoc County Irrigation Co., 301 Columbia Trust Bldg., Los Angeles, Cal. '07
*Wilding, James, Jr., Chem., Smelter Supt., Rio Tinto Copper Co., Terrazas (L. N. de M.), Chih., Mexico. '96
*Wiles, Edwin L.....Stony Point, Rockland Co., N. Y. '82
**Wiley, Walter H., Min. Engr., 367 S. Bonnie Brae St., Los Angeles, Cal. '96
*Wiley, William H., Scientific Publisher, 43 E. 19th St., New York, N. Y. '81
*Wiley, W. Murdoch.....32 W. 40th St., New York, N. Y. '00
*Wilfley, Clifford R., Mgr., Bristow Mine.....Ouray, Colo. '12
*Wilkens, Henry A. J., Min. Engr.....30 Church St., New York, N. Y. '92
*Wilkins, Llewellyn H., Cons. Engr., Finsbury Pavement House, London, E. C., England. '12
*Wilkins, William, Genl. Supt., Iron Dept., Lake Superior Iron & Chem. Co., 423 Penobscot Bldg., Detroit, Mich. '91
*Wilkins, William Glyde, Civ. and Min. Engr., Wm. G. Wilkins Co., Westinghouse Bldg., Pittsburg, Pa. '91
**Wilkinson, Arthur, Min. Engr., St. Stephen's Club, London, England. '00
*Wilkinson, Bernard A., Min. Engr., Cia. Minera San Felipe de Jesus, Apartado 7, Real del Monte, Hid., Mexico. '09
*Wilkinson, Charles Dean, Min. Engr., Genl. Mgr., Daisy Min. Synd., Goldfield, Nev. '97
*Wilkinson, David, Asst. Cons. Engr., Care S. Neumann & Co., Salisbury House, London Wall, London, E. C., England. '08
*Wilkinson, John F., Surveyor.....Hotel Merritt, Oakland, Cal. '90
*Wilkinson, William F., Min. Engr., 12 St. James Pl., London, S. W., England. '88
*Willard, James O., Civ. Engr., Eliza Furnaces.....2d Ave., Pittsburg, Pa. '04
*Willard, Lewis L., Chief Engr.....W. J. Rainey Estate, Uniontown, Pa. '12
**Williams, Alpheus F., Genl. Mgr., De Beers Cons. Mines, Ltd., Kimberley, So. Africa. '97
*Williams, Ben, Mining.....1938 Harvard Boulevard, Los Angeles, Cal. '82
*Williams, David, Publisher.....437 Eleventh Ave., New York, N. Y. '80
*Williams, Edward G., Vice-Prest., J. G. White Engrg. Corpn., 43 Exchange Pl., New York, N. Y. '97
*Williams, Edward H.....Care Thomas Iron Co., Hokendauqua, Pa. '93
*Williams, Edward H., Jr.....“Westerdale,” Woodstock, Vt. '76
*Williams, Edwin P., Supt., Blast Furnaces, Tennessee Coal, Iron & R. R. Co., Bessemer, Ala. '07
**Williams, Fred. T., Min. Engr., Daly West Mining Co., Park City, Utah. '02
**Williams, Gardner F., Min. Engr.....2201 R St., Washington, D. C. '86
*Williams, Henry J., Engr., Anal. Chem., 161 Tremont St., Boston, Mass. '87

*WILLIAMS, J. MILLER, JR., Supt., Mining Dept., Cia. Metalurgica Mexicana, Apartado 132, San Luis Potosi, Mexico. '06
*WILLIAMS, J. PETER, Min. Engr.....Tazewell, Va. '12
*WILLIAMS, JOHN R., Cons. Met. Chem., Care Standard Bank of S. A. 10 Clements Lane, London, E. C., England. '99
*WILLIAMS, JOHN T., Mine Owner, Engr., 27 William St., New York, N. Y. '74
*WILLIAMS, LUKE, Min. and Cons. Engr.....Claremont, Moonah, Tasmania. '93
*WILLIAMS, MORRIS, Prest., Susquehanna Coal Co., 907 Arcade Bldg., Philadelphia, Pa. '91
*WILLIAMS, RALPH B., Met., Min. Engr., Minas Dolores y Anexas, Matehuala, S. L. P., Mexico. '05
*WILLIAMS, RICHARD E., Asst. Supt., Waihi Mine, Waihi, Auckland, N. Z. '03
*WILLIAMS, ROBERT Y., Mine Supt.....803 S. Lincoln Ave., Urbana, Ill. '05
**WILLIAMS, S. HERBERT.....23 Somerset Ave., Winthrop, Mass. '95
*WILLIAMS, WILLIAM A., Chief Geol., Associated Oil Co., 814 Sharon Bldg., San Francisco, Cal. '03
**WILLIAMSON, H. D., Asst. Supt., Engr., Rising Sun Petroleum Co., P. O. Box 331, Yokohama, Japan. '03
*WILLIAMSON, W. DUNCAN, Met., Mgr., Mount Boppy Gold Mining Co., Ltd., Boppy Mountain, N. S. W., Australia. '96
*WILLIS, ALFRED B., Min. Engr., Garbrand Hall, Ewell, Surrey, England. '02
*WILLIS, BAILEY, Geol. and Min. Engr., U. S. Geological Survey, Washington, D. C. '92
*WILLIS, FRANK G., Min. Engr., Ajax Gold Mining Co. and Independent Cons. Gold Mining Co., Box 1119, Cripple Creek, Colo. '97
*WILLIS, HARRY T.....Champaign, Ill. '03
*WILLMOTT, ARTHUR B., Mine Mgr., 404 Lumsden Bldg., Toronto, Ont., Canada. '01
*WILLSON, FREDERICK E., Min. Engr. & Met., 1108 Spruce St., Berkeley, Cal. '98
*WILMOT, H. CLIFFORD, Min. Engr., Colorado Mining Co., Aroroy, Masbate, P. I. '03
*WILMOTH, LESLIE J., Care Inst. of Min. and Met., Salisbury House, London, E. C., England. '09
*WILSON, ALBERT D., City Engr.....P. O. Box 156, Deadwood, S. D. '97
**WILSON, ALFRED W. G., Engr., Min. Geol., Mines Branch, Dept. of Mines, Ottawa, Ont., Canada. '06
*WILSON, ARDEN M., Mining.....P. O. Box 282, Telluride, Colo. '12
*WILSON, ELLIOTT H., Civ., Min. Engr., Supt., Belmont Mine, Butte, Mont. '87
**WILSON, ELWOOD J., Mining.....Address wanted. '94
*WILSON, FREDERICK C., Asst. Supt., Spanish-American Iron Co., Felton, Oriente, Cuba. '12
*WILSON, GEORGE BENNETT.....Racine Rubber Co., Racine, Wis. '07
**WILSON, GEORGE BENTON, Min. Engr., Care American Smelting & Refining Co., Salt Lake City, Utah. '99
**WILSON, GORDON, Met., Chem., Cyanide Exp., Apartado 188, Durango, Mexico. '02
*WILSON, HARRY.....31 Queen St., Melbourne, Victoria, Australia. '93
*WILSON, JOHN B., Mine Mgr., La Empresa Socavonera del Cerro de Pasco, Cerro de Pasco, Peru, South America. '06
*WILSON, JOHN BOWIE, Cons. Min. Engr., 82 Pitt St., Sydney, New South Wales, Australia. '02
*WILSON, JOHN BYRON, Min. Engr.....Wallace, Idaho. '12
†WILSON, M. O., Mfr. and Miner.....33 Wall Street, New York, N. Y. '91
*WILSON, NATHANIEL, Cons. Mech. Engr., 68 Cross Oak Rd., Berkhamsted, Herts., England. '98

**Wilson, Newton R.....780 Sabine Pass Ave., Beaumont, Texas. '81
**Wilson, Richard, Mine Mgr., Mammoth Mining Co.....Wallace, Idaho. '00
†Wilson, R. T., Jr., Mfr. and Miner.....33 Wall St., New York, N. Y. '91
*Wilson, William A., Cons. Min. Engr., P. O. Box 7, Salt Lake City, Utah. '83
*Wiltsee, E. A., Chem.....Pacific Union Club, San Francisco, Cal. '86
**Winchell, Alex. N., Min. Engr., Geol., Univ. Wisconsin, Madison, Wis. '01
**Winchell, Horace V., Min. Geol., 505 Palace Bldg., Minneapolis, Minn. '92
*Wines, Jerry M., Miner.....P. O. Box 535, San Antonio, Texas. '01
*Winmill, Hallett, Min. Engr., Mgr., Northern Nigeria (Bauchi) Tin Mines, Ltd., Care P. O., Naragata, Northern Nigeria, West Africa. '98
*Winslow, Arthur, Min. Engr., Prest. and Genl. Mgr., Liberty Bell Gold Mining Co., 131 State St., Boston, Mass. '81
*Winwood, Job H., Min. Engr., Continental Block, Salt Lake City, Utah. '07
*Wiseman, Philip, Genl. Mgr., American Mines & Exploration Co., 1003 Central Bldg., Los Angeles, Cal. '98
*Wishon, A. Emory, Engr., San Joaquin Light & Power Corpn., Fresno, Cal. '09
*Wishon, Walter W., Cons. Engr., 1721 S. Vermont Ave., Los Angeles, Cal. '82
*Wister, Jones, Pig Iron, Coal, Coke, 672 Bullitt Bldg., Philadelphia, Pa. '79
*Witherbee, Frank S., Prest., Witherbee, Sherman & Co., Port Henry, N. Y. '75
*Witherbee, Walter C., Treas., Witherbee, Sherman & Co., Port Henry, N. Y. '80
*Witherby, Edwin C., Met. Engr., Care Semet-Solvay Co., Syracuse, N. Y. '05
*Witherell, Charles S., Supt., Copper Dept., Balbach S. & R. Co., Newark, N. J. '10
**Wittenoom, Charles H.....Muralgarra Station, via Yalgoo, West. Aust. '03
*Woakes, Ernest R., Cons. Min. Engr., 6 Queen St. Pl., London, E. C., England. '89
*Wolf, Albert G., Min. Engr.....Mason Valley Mines Co., Mason, Nev. '09
*Wolf, Albert H., Cons. Engr., Room 1148, 10 So. La Salle St., Chicago, Ill. '82
*Wolf, Harry J., Min. Engr., Stanley Mines.....Idaho Springs, Colo. '03
*Wolf, Martin Y., Mining.....1748 Beach St., San Diego, Cal. '11
*Wolf, Otto C., Engr., Architect, 511 Dunckla Bldg., 11th and Market Sts., Philadelphia, Pa. '12
**Wolff, Dr. Fr. M.....2 Jaegerstrasse, Berlin, W., Germany. '82
*Wolff, Mark A., Assayer and Chem., 618 Pacific Bldg., Vancouver, B. C., Canada. '06
*Wolflin, Hugh M., Engr., U. S. Bureau of Mines, Mine Rescue Sta., University Campus, Seattle, Wash. '10
*Wolle, Hartley C., Genl. Supt., Cambria Steel Co.....Johnstown, Pa. '86
*Womble, Lloyd A., Genl. Mgr. Geduld Proprietary Mines, Ltd., Box 41, Springs, Transvaal, So. Africa. '03
**Woo, Yang Tsang, Assayer, Chinese Engineering & Mining Co., Ltd., Tong Shan, near Tientsin, North China. '00
*Wood, E. F., 1st Vice-Prest., International Nickel Co., 43 Exchange Place, New York, N. Y. '76
*Wood, Frederick W., Prest., Maryland Steel Co....Sparrows Point, Md., '12
*Wood, George R., Elec. Dept., Berwind-White C. M. Co., Arcade Bldg., Philadelphia, Pa. '05
*Wood, Lee S.....626 Tinken Bldg., San Diego, Cal. '96
*Wood, Richard G., Iron and Steel Mfr.....Conshohocken, Pa. '11
*Wood, Stuart, Mining.....400 Chestnut St., Philadelphia, Pa. '06

*Wood, Thomas A., Chem., Mining.....Duncan, B. C., Canada. '05
*Wood, Thomas D., Iron Mfr.....81 Vandergrift Bldg., Pittsburg, Pa. '79
**Wood, Walter, Iron Mfr.....400 Chestnut St., Philadelphia, Pa. '85
*Wood, William O., Mgr., By-Product Coke Ovens, Semet-Solvay Co.,
Benwood, W. Va. '00
*Woodbridge, Dwight E., Min. Engr., Providence Bldg., Duluth, Minn. '06
**Woodbridge, Tyler R., Citrus Fruit Grower.....Upland, Cal. '87
*Woodbury, Frederick E., Vice-Prest., Newport Mining Co.,
Colby-Abbot Bldg., Milwaukee, Wis. '04
*Woodbury, L. S., Cons. Engr.....P. O. Box 249, Placerville, Cal. '80
*Woodman, J. Edmund, Prof. Geol., Min., New York University,
New York, N. Y. '05
*Woods, Clarence. Min. Engr.....Shawmut, Tuolumne Co., Cal. '07
*Woods, Francisco J., Supt. of Mines and Mills,
Apartado 161, Oaxaca, Oaxaca, Mexico. '06
*Woods, Frank M., Western Financing Corpn.,
200 Mining Exchange Bldg., Colorado Springs, Colo. '98
**Woodward, Allan H., Genl. Supt...Woodward Iron Co., Woodward, Ala. '00
*Woodward, W. M. H., Min., Met. Engr.....Tuolumne, Cal. '03
*Woodworth, Robert B., Civ. Engr....427 Carnegie Bldg., Pittsburg, Pa. '10
†Woollcombe, Robert L., Barrister-at-Law,
14 Waterloo Road, Dublin, Ireland. '11
**Woolmer, Herbert C. P., Genl. Mgr., Spassky Copper Co., Ltd.,
Akmolinsk, Siberia. '98
*Woolrich, Arthur H., Civ., Min. Engr., Box 27, Oaxaca, Oax., Mexico. '04
*Workman, Charles W., Min. Engr., 111 Alfred St., Kingston, Ont., Canada. '07
*Worth, John G., Min. Engr.....P. O. Box 295, Santa Fé, N. M. '09
*Wraight, Ernest A., Met., Royal School of Mines,
So. Kensington, London, England. '12
*Wraith, William, Met. International S. & R. Co.,
Kearns Bldg., Salt Lake City, Utah. '03
*Wright, Charles O., Min. Engr., Asst. Engr.,
Fayette Engineering Co., Uniontown, Pa. '10
*Wright, Charles W.....Ingurtosu, Arbus, Sardinia, Italy. '05
*Wright, Clarence A., Min., Met. Engr., U. S. Bureau of Mines,
Washington, D. C. '12
*Wright, Edward T., Ore Milling Engr.,
1730 1st Natl. Bank Bldg., Chicago, Ill. '09
*Wright, Frederic E.....Geophysical Laboratory, Washington, D. C. '04
*Wright, Herbert B., Engr., Pocahontas Cons. Collieries Co.,
Pocahontas, Va. '05
*Wright, Jesse T., Assayer.....Wallace, Idaho. '13
*Wright, Lewis T., Junior Constitutional Club, Picadilly W., London, Eng. '97
*Wright, Louis A., Min. Engr..... .....813 Mills Bldg., El Paso, Tex. '04
*Wright, William Q., Min., Civ. Engr.,
727 Merchants Exchange Bldg., San Francisco, Cal. '99
**Wurgler, André, Min. Engr., Prof. Mining, 7 Rue Viète, Paris, France. '85
*Wüst, Fritz, Met., Prof. Königl.-Tech. Hochschule, Ludwigs Allee,
Aachen, Germany. '05
*Wyatt, Francis, Cons. Anal. Chem., 402 West 23d St., New York, N. Y. '87
*Wyatt, James S., Mine Mgr.....P. O. Box 9, Sausalito, Cal. '05
*Wyer, Samuel S., Mech. Engr.....Harrison Bldg., Columbus, Ohio. '05
**Wynne, Ashley H. P., Assayer, Care Calabacillas Mining Co.,
via San José de Garcia, Sinaloa, Mexico. '95

*YAMADA, NAOYO, Dir., Mitsui Min. Co.,
23 Nakaroku bancho, Kojimachiku, Tokyo, Japan. '12
*YAMAGUCHI, KISABURO,.....24 Hinokicho Akasakaku, Tokyo, Japan. '10
*YAMANŌUCHI, SHIGEMA, Cons. Engr. to Takata & Co.,
Kojîmachi-Ku, Tokyo, Japan. '98
†YANG, CHO, Student.....P. O. Box 202, So. Bethlehem, Pa. '12
*YARD, HENRY H., Min. Engr., North Carolina Mining Co.,
606 Metropolis Bank Bldg., San Francisco, Cal. '98
*YATES, ARTHUR, Min., Met. Engr.,
30 Frederick St., Bispham, Blackpool, England. '10
*YATES, BRUCE C., Min. Engr., Asst. Engr., Homestake Min. Co., Lead, S. D. '03
†YATES, JAMES, Min. Engr.....Instructed to hold all mail. '11
*YEAGER, HOWARD M., Min. Engr., Continental Coal Corpn., Wallsend, Ky. '12
*YEANDLE, WILLIAM H., JR., Min. Engr., U. S. Smelt., Ref. & Min. Co.,
411 Edificio de la Mutua, Mexico City, Mexico. '04
*YEATMAN, POPE, Min. Engr.....165 Broadway, New York, N. Y. '83
*YNGSTRÖM, LARS, Director of Iron Works.....Falun, Sweden. '06
*YONGE, ALLEN M., Min. Engr., Met., La Union Mine,
Miramar, Costa Rica, C. A. '00
*YORK, JAMES E., Cons. Engr.....113 Montague St., Brooklyn, N. Y. '87
*YOUD, HERBERT, Min. Engr.....Guarda, Portugal. '12
†YOUNG, CARL D., Min. Student.....Sigma Nu House, Rolla, Mo. '10
*YOUNG, CHARLES D., Engr. of Tests.....Pennsylvania R. R., Altoona, Pa. '12
*YOUNG, CLINTON M., Min. Engr.....1227 Ohio St., Lawrence, Kan. '09
*YOUNG, EDWARD L., Mgr., Takata & Co., 50 Church St., New York, N. Y. '87
**YOUNG, GEORGE J., Prof. Min., Met., Mackay School of Mines,
Univ. of Nevada, Reno, Nev. '00
*YOUNG, HAYES W., Instructor in Met..... ....Stanford University, Cal. '12
**YOUNG, HENRY S., Min. Engr., Mgr., Bau Mines of Borneo Co., Ltd.,
Bau Kuching, Sarawak, Borneo, Dutch East Indies. '03
*YOUNG, JAMES S., Min. and Met. Engr., Casilla 41,
Iquique, Chile, So. America. '95
*YOUNG, WAYLAND H., Min. Engr.....403 Adams St., Oakland, Cal. '04
*YUNG, MORRISON B., Min. Engr....5 Arbuthnot Road, Hong Kong, China. '02
*YUNGBLUTH, ANDREW J., Mine Accountant,.....Ishpeming, Mich. '12

*ZALINSKI, EDWARD R., Min. Engr.,
819 Newhouse Bldg., Salt Lake City, Utah. '12
*ZAPFFE, CARL, Min. Geol..... P. O. Box 93, Brainerd, Minn. '11
*ZEHNDER, C. H., Pig Iron Mfr.....140 Cedar St., New York, N. Y. '87
*ZELLER, HOWARD P., Min. Engr., Republic Iron & Steel Co., Republic, Pa. '08
*ZERBEY, FREDERICK E., Min. Engr., 97 No. River St., Wilkes-Barre, Pa. '92
*ZIESING, RICHARD, Mgr., Spelter Plant.....Old Arcade, Cleveland, Ohio. '09
*ZIMMERMAN, ADOLPH A., Chem., Assayer.....Box 704, Helena, Mont. '96
*ZOCH, FRANK P., Tunnel Work.....514 Wood St., Pittsburg, Pa. '09
*ZWICKY, WILLIAM E., Mine Mgr., Rambler-Cariboo Mine, Ltd.,
Kaslo, B. C., Canada. '05

Honorary Members	17
Life Members	400
Members	3,715
Life Associates	7
Associates	151
Total	4,290

LIST OF MEMBERS AND ASSOCIATES GEOGRAPHICALLY ARRANGED.

Corrected to March 1, 1913.

ALABAMA.

Anniston.—Noble, A. E., 20th St. and Wilmer Ave.
Auburn.—Brown, R. L., Box O.
Battelle.—Green, G. G.
Bessemer.—Abbott, C. E., T. C., I. & R.R. Co.
Dobbs, G. G., Box 97.
Ferguson, V., U. S. C. I. Pipe & Fdy. Co.
Williams, E. P., Tenn. C., I. & R. R. Co.
Birmingham.—Aldrich, T. H.
Aldrich, T. H., Jr., 615 Brown-Marx Bldg.
Allen, A. W., 1616 S. 14th Ave.
Bonnyman, J., 907 Brown-Marx Bldg.
Bowron, J., 1401 S. 20th St.
Burbidge, T. A., Brown-Marx Bldg.
Coxe, E. H., Tenn. C., I. & R. R. Co.
Crawford, G. G., Tenn. C., I. & R. R. Co.
Crockard, F. H., Brown-Marx Bldg.
Ellis, E. E., 1515 Brown-Marx Bldg.
Fairbairn, C. T., Woodward Bldg.
Geismer, H. S., Keiser-Geismer Engrg. Co.
Hiller, E., Box 884.
Lamb, W. H., Jr., 1216 Brown-Marx Bldg.
McCormack, G. B., Box 42.
Maben, J. C., Sloss-Sheffield S. & I. Co.
Moffett, C. A., 909 Brown-Marx Bldg.
Penhallegon, W. J., Republic I. & S. Co.
Prickett, W. C., 1212 N. 12th Ave.
Ramsay, E., Brown-Marx Bldg.
Searles, L. W., 201 Woodward Bldg.
Corona.—Pill, J. R., Corona Coal & Iron Co.
Ensley.—Laudgrebe, K. L., Tenn. C., I. & R R. Co.
Holt.—Shook, J. W.
Huntsville.—Moss, M.
Josper.—Fies, M. S., R. F. D. 1.
Lehigh.—Toulmin, P., Lehigh Coal Co.
Marvel.—Roden, B. F., Roden Coal Co.
Rock Run.—Garvin, J. M., Bass Fdy. & Machine Co.
Sayreton.—Morris, F. G.
Thomas.—Kluttz, W. L., Thomas Furnaces.
University.—Smith, E. A.
Woodward.—Bush, M. W., Woodward I. Co.
Gambrill, G. T., Jr., Woodward Iron Co.
Woodward, A. H., Woodward Iron Co.

ALASKA.

Cordova.—Hazelet, G. C., Cordova Power Co.
Douglas.—Le Noir, F. H.
Ellamar.—Middlekamp, L.L., Ellamar M. Co.
Fairbanks.—Hamilton, A. L.
Vanderlip, W. B.
Iditarod.—Austin, E. A., Yukon Gold Co.
Juneau.—Mackay, A.
Nieding, B. B., Kensington Min. Co.
Smith, S.
Smith, S. S.
Thane, B. L., Eagle River Min. Co.
Whipple, J. R.
Katalla.—Hampton, W. H.
Ketchikan.—Barber, J. C.
Kotsina.—Gray, E. F.
Nome.—Lindeberg, J., Pioneer Mining Co.
Treadwell City.—Kennedy, E. P., Alaska-Treadwell G. M. Co.
Kinzie, R. A., Alaska-Treadwell G. M. Co.
Lass, W. P.
Wayland, R. G.
Valdez.—Crary, C. N.
Esterly, G. M.

ARIZONA.

Alto.—Bond, J., Toluachi Mine.
Arivaca.—Tryon, C. T., Oceanic Mine.
Bisbee.—Douglas, W., Copper Queen Cons. Min. Co.
Fricke, J. H.
Hodgson, J. P., Box 208.
Kitson, H. W., Box 1619.
Notman, A., Box 1062.
Pelton, R. T., Copper Queen Mine.
Roesler, M. B., Box 2223.
Sherman, G. F. G., Copper Queen Cons. Min. Co.
Smith, F. W., Clark's Engr. and Assay Office.
Smith, H. A.
Bowie.—Griffith, W. V.
Christmas.—Sherman, S. H., Gila Copper Sulphide Co.
Clifton.—Carmichael, N., Arizona Copper Co.
Earling, R. B., Arizona Copper Co.
Flynn, F. N., Arizona Copper Co.
Heck, E. C., Clifton Water & Improvmt. Co.
Nack, C., Clifton Hotel.
Ruggles, G. H.
Sloan, W. A., Shannon Copper Co.
Congress Junction.—Durfee, E. W., Alvarado Gold Mining Co.
Courtland.—McBride, W. G., Great Western Copper Co.
Crown King.—Nelson, J. L., Old Tiger Mine.
Des Cabezas.—Wash, E. R., Mascot Cop. Co.
Douglas.—Douglas, J. S.
Gahl, R., Copper Queen Cons. Copper Co.
Greenidge, S. M., Box 364.
Hammond, H. O., Copper Queen Red. Wks.
Lee, G. B., Copper Queen Reduction Wks.
Norton, B. N., Tomlinson & Norton.
Patterson, S. B., Jr., Box 713.
Rutherford, F., Copper Queen Reduct'n Wks.
Van Arsdale, G. D., Copper Queen Cons. Mining Co.
Elgin.—Fraizer, I. P.
Florence.—Sieboth, A. C.
Leland, E., Leonard Copper Co.
Gleeson.—Penberthy, J. E., Leonard Cop. Co.
Globe.—Hoar, F. W., Box 959.
McCarthy, M. E., Globe Cons. Copper Co.
Sultan, W. S.
Hayden.—Daveler, E. V., Box 257.
Dresser, C. G., Box 257.
Murray, H. T., Ray Cons. Copper Co.
Helvetia.—McCleary, W. B.
Hillside.—Geisendorfer, H. A., Arizona-Nevada Copper Co.
Humboldt.—Walker, R. T., Cons. Ariz. Smelting Co.
Jerome.—Clark, W. L., United Verde Cop. Co.
Hopkins, C. V., United Verde Copper Co.
Kingman.—Schader, H. G.
Wheelock, R. P., Box 125.
Mayer.—Trengove, S. R., Cons. Ariz. Smelting Co.
Metcalf.—Irwin, D. D., Care W. R. Cox.
Miami.—Arnold, C. E. Le N., Inspiration Copper Co.
Bowen, H. P.
Brule, F. J., Inspiration Copper Co.
Buell, L. T.
Burch, H. K. Inspiration Copper Co.
Drummond, T. R.
Gottsberger, B. B., Miami Copper Co.
Lawton, N. O., Miami Copper Co.

Miami.—Continued.
Maclennan, F. W., Box 100.
Mills, C. E., Detroit C. M. Co. of Ariz.
Naething, F. S.
Rice, E. R., S. W. Miami Dev. Co.
Morenci.—Honeyman, E. W., Detroit Copper Co.
Kiddie, J., Box 201.
McLean, M. H.
Nogales.—Bonillas, Y., Box 154.
Curtis, B.
Glore, H. G., Humboldt Min. & Red. Co.
McIntyre, J. E., Box 122.
Noon, E. E.
Oatman.—Moser, G. F.
Old Glory.—Fraser, A, J., El Oro Mine.
Patagonia.—Pearce, E. A., Commonwealth Mine.
Phœnix.—Armstrong, T., Care Surveyor General.
Defty, W. E.
Kramm, H. E., Box E.
Poland.—Longacre, O.
Prescott.—Blauvelt, H., Cash Mine Co.
McIntosh, J. B. S., United Verde Copper Co.
Ray.—Boyd, W., Ray Cons. Copper Co.
Cates, L. S., Ray Cons. Copper Co.
Lindau, S. P.
Superior.—Thornton, E. T.
Tombstone.—Macia, J. H., Box 555.
Tucson.—Burgess, J. DeW., Box 747.
Cole, D., 35 E. University Ave.
De Kalb, C., Pacific S. & M. Co.
Edwards, W. S., 110 E. 14th St.
Fishburn, R. E., Schrader Bldg.
Goodrich, R. R., Univ. of Arizona.
Gunther, C. G., Santa Rita Hotel.
Kruttschnitt, J., Fenner Bldg.
Masters, J. E., 240 W. 5th St.
Milton, M. C., Schrader Bldg.
Richmond, A. B., 44 W. Congress St.
Tolman, C. F., Jr., 521 E. 3d St.
Waters, A. L., 717 N. 6th Ave.
Walker.—Reynolds, H. D. G., Penn-Ariz. Min. Co.
Warren.—Joralemon, I. B., Calumet & Arizona Mining Co.
Wickenburg.—Libbey, F. W.
Mackay, A. R.

ARKANSAS.

Fayetteville.—Drake, N. F.
Fort Smith.—Denman, H., Bache-Denman Coal Co.
Little Rock.—Fordyce, J. R., Thomas Fordyce Mfg. Co.

CALIFORNIA.

Alameda.—Stow, H. P., 1617 Central Ave.
Amador City.—Downs, C. R., Bunker Hill Cons. Mining Co.
Avila.—Heise, A. R., Union Oil Co.
Benton.—Alderman, S. J.
Cahoone, W. M.
Edsall, B.
Berkeley.—Baird, D., 2436 Prospect Ave.
Blake, E. T., 2233 Piedmont Way.
Christy, S. B., Univ. of California.
Corbus, A. W., 1512 La Lama Ave.
Corkill, F., 2611 Ashby Ave.
Daniel, W. B., 2443 Woolsey St.
Durham, E. B., Univ. of California.
Gow, P. G., 1619 Walnut St.
Hersam, E. A., Univ. of California.
Kidwell, E., 2011 Channing Way.
Mansfield, N. T., 2124 Parker St.
Morley, W. S., Univ. of California.
Thomas, F. F., 2719 Dwight Way.
Turner, R. C., 2511 Bancroft Way.
Wepfer, G. W., 1833 Cedar St.
Willson, F. E., 1108 Spruce St.
Big Creek.—Banks, H. P., Camp 2.
Bishop.—Leffingwell, W. H., Mono Power Co.
Del Mar, A.
Bodie.—Buchanan, J. R., Standard Cons. Min. Co.
Grunsky, C. E., Jr., Standard Cons. Min. Co.
Campo Seco.—Busey, A. P., Jr., Penn. Min. Co.
Jordan, H. S.
Carrville.—Beck, E. L.
Chico.—Gage, E. C.
Coalinga.—Haseltine, R. S.
Smalley, W. W., Box 797.
Copperopolis.—Trerise, J. H., Calaveras Cop. Co.
Covelo.—L'Hame, W. E., Lock Box 18.
Dale.—McGee, J., United Greenwater Cop. Co.
Schiffner, O. E.
East Auburn.—Power, H. T.
East Oakland.—Nichols, H.B., 7 Orange Ave.
Easton.—Aubury, L. E.
El Dorado.—Sheafe, H. J.
Fresno.—Wishon, A. E., San Joaquin Light & Power Co.
Galt.—Harvey, F. H.
Glendale.—Cummings, W. N., 1st & Cedar Sts.
Grass Valley.—Bedford, R. H., North Star Mines.
Foote, A. B., North Star Mines Co.
Foote, A. DeW., North Star Mines Co.
Nye, R.
Reeves, T. V., North Star Mines Co.
Skewes, H. B., Box 141.
Greenville.—Whitney, J. D.
Hemet.—Deegan, J.
Hermosa Beach.—Gage, E. B.
Hollywood.—Beall, C. A., Box 126.
Beall, A. S. E., Box 126.
Edmondson, H. W., 6050 Carlton Way.
Merrill M. E.
Jackson.—Detert, W. F.
Rainsford, R. S.
Keddie.—Grill, C. H.
Keeler.—Portugal, J. H.
Kennett.—Kervin, G. A., Mammoth Smelter.
Kervin, J. H., Mammoth Copper Mining Co.
Metcalfe, G. W., Mammoth Copper Min. Co.
Keswick.—Stenger, E. L., Mountain Copper Co.
Knob.—Waste, H. L., Midas G. M. Co.
Wells, F. B., Midas G. M. Co.
Lakeside.—Shaw, H. I.
Livermore.—Schwennesen, A. T.
Long Beach.—Berray, N. S., 725 Magnolia Ave.
Loomis.—Martin, N. J., Beaver G. D. Co.
Loope.—Applegren, J. O. W.
Los Angeles.—Abbott, J. W., Hotel Hollenbeck.
Arnold, R., Union Oil Bldg.
Blackmar, W. D., University Club.
Brown, H. L., 909 Harvard Blvd.
Carpenter, A. B., California Bldg.
Carson, E. W., 2142 Thompson St.
Chartier, G. M., 1144 Title Insurance Bldg.
Choate, W., 827 Central Bldg.
Comstock, T. B., 909 Van Nuys Bldg.
Cronin, P. B., 721 S. Hope St.
Dewey, W. P., 2656 Vermont Ave.
Farrell, J. H., 527 Union League Bldg.
Farnum, H. C., 6929 Hawthorne Blvd.
Fenner, C. H., Trust and Savings Bldg.
Field, F. M., 2343 W. 31st St.
Fitch, M. B., 2730 Raymond Ave.
Fletcher, C. R., 402 Stimson Bldg.
Galbraith, M. M., 1110 West Jefferson St.
Godshall, L. D., 2892 Sunset Pl.
Goodloe, M., San Fernando Bldg.
Gormly, S. J., 3063 E. 6th St.
Hadden, R. W., 1807 Harvard Blvd.
Haggott, E. A., 2525 W. 18th St.
Hand, C. H., 4704 Wilton Pl.
Hartman, W. E., 5 Wabash Ave.
Heberlein, C. A., 1710 Arlington Ave.
Howat, A. M., 908 W. P. Story Bldg.
Howell, F. D., 548 H. W. Hellman Bldg.
Imhoff, A., 1581 Custer Ave.
Irwin, F. 2357 W. 31st St.

Los Angeles.—Continued.
Jackson, B. N., 836 Kensington Rd.
Johnson, G., Jr., 418 Merchants Trust Bldg.
Jones, C. C., 1001 Trust and Savings Bldg.
Keith, F. A., 731 Central Bldg.
Langley, S. S., 1103 I. N. Van Nuys Bldg.
Lashbrooke, J. R., 1618 Rockwood St.
Lindberg, C. O., 527 Union League Bldg.
Lindsay, L., 627 Security Bldg.
Linton, R., Trust & Sav. Bldg.
Lippincott, J. B., 1108 Central Bldg.
Lonsbery, G. A., 1144 Title Insurance Bldg.
McPherson, W. B., 2301 W. 20th St.
Maynard, R. E., 419 S. Commonwealth Av.
Merrill, F. J. H., 610 Citizens Bank Bldg.
Mitchell, G., 1467 S. Figueroa St.
Montgomery, E. A., 1106 Los Angeles Investment Bldg.
Morgan, G. H., 314 Central Bldg.
Morton, E. D., 6001 Eleanor Ave.
Moss, C. O., 936 Union Oil Bldg.
Mudd, S. W., 1001 Central Bldg.
Myers, D. B., 321 Story Bldg.
Newberry, A. W., 321 Story Bldg.
North, W. O., 303 Henne Bldg.
Norton, R. H., 335 W. 27th St.
Oxnam, T., 2211 Cambridge St.
Pagliuchi, F. D., 1144 Title Insurance Bldg.
Palmer, C. H., Jr., 250 W. 40th Pl.
Parnall, S. A., 1807 Manhattan Pl.
Parrish, S. F., 1400 Union Trust Bldg.
Pearce, S. L., Sierra Madre Club.
Perez, R. A., 120 N. Main St.
Phillips, J. L., 2159 W. 25th St.
Plater, J. E., 707 W. 28th St.
Potter, C. F., Title Insurance Bldg.
Powell, L. W., 914 Central Bldg.
Probert, F. H., 314 Central Bldg.
Robbins, F., Union Trust Bldg.
Robinson, S., 1477 Ridge Way.
Sandoval, A., 1142 W. Adams St.
Shanks, D. W., 809 Title Insurance Bldg.
Shannon, C. M., California Club.
Spangler, H., 329 San Fernando Bldg.
Squires, H. W., 2007 Ocean View Ave.
Staunton, W. F., 512 S. Harvard Blvd.
Storrow, S., Wright & Callender Bldg.
Strong, A. McC., 530 Union Oil Bldg.
Sulliger, R. A., 1400 Union Trust Bldg.
Thomas, E. G., 700 Union Oil Bldg.
Thompson, C. H., 1127 W. 27th St.
Throckmorton, H. W., Trust & Savings Bldg.
Timmons, C., 4819 Budlong Ave.
Tolman, J. D., Jr., 918 W. 1st St.
Treadwell, E. D., 317 S. Olive St.
Wainewright, W. B., Union Oil Bldg.
Watts, W. L., 803 N. Bonnie Brae St.
Wickes, L. W., 134 Norton Ave.
Wilde, T. B., 301 Columbia Trust Bldg.
Wiley, W. H., 367 S. Bonnie Brae St.
Williams, B., 1938 Harvard Blvd.
Wiseman, P., 1003 Central Bldg.
Wishon, W. W., 1721 S. Vermont Ave.

Los Gatos.—Corbus, J. P., Box 123.

Mammoth.—Chapman, J. E., Mammoth Mine.

Martell.—Smith, W., Kennedy M. & M. Co.

Melones.—Devereux, W. G., Melones Min. Co.
Fulton, J. A.

Mill Valley.—Melliss, D. E., Box V.

Napa.—Veatch, J. A., 497 Pine St.

Needles.—Claypool, W. M.

Nevada City.—Brockunier, S. H.
Derby, C. C.

Newark.—Patterson, H. H.

Oakland.—Benjamin, E. H., 805 Linden St.
Browne, R. E., 234 Perry St.
Browne, S. C., 402 Edwards St.
Butters, C., 121 59th St.
Coe, I. J., 541 28th St.
Collier, J. H., 3014 Nicol Ave.
Cox, T., 463 Ellita Ave.
Diggles, R. N., 309 Chicago Ave.
Galvin, C. D., 1311 Franklin St.
Garthwaite, E. H., 391 Fairmont Ave.
Gilman, C. E., 406 Syndicate Bldg.

Oakland.—Continued.
Horswill, F. J., 1070 16th St.
Huntley, D. B., 31 Bella Vista Ave.
Searles, D., Albany Block.
Wilkinson, J. F., Hotel Merritt.
Young, W. H., 403 Adams St.

Oroville.—Hamlyn, J. J., Natomas Cons. of Calif.
Perry, O. C., Indian Gold Dredging and Mining Co.
Steel, D., 1423 Donnelson Ave.

Palo Alto.—Bradford, S. K., Box 72.
Clevenger, G. H., 381 Hawthorne Ave.
Holman, F. C., 558 Lincoln Ave.
Hyde, J. M., 334 Lincoln Ave.
Prichard, W. A., Care Bank of Palo Alto.

Pasadena.—McCollom, C. R., 486 California Terrace.
Moody, B., 1043 San Pasqual St.
Neill, J. W., 400 Arroya Terrace.
Severy, C. L., 385 Oakland Ave.

Placerville.—Clark, G. M., Sherman Mining & Mill. Co.
Woodbury, L. S., Box 249.

Porterville.—Abadie, E. R., Box 566.

Quincy.—Adams, H., Rush Creek Placer M. Co.
Redding, C. T., Box 400.

Redlands.—Lodge, R. W., Box 84.

Rialto.—Thoms, C. C.

Riverside.—Austin, W. L., Box 1061.
Bain, H. A.
Clark, J. E., 2193 Victoria Ave.
Skelley, R. D., 135 Orange St.

Ross.—Webber, G. E.

Sacramento.—Derby, H. S., Peoples Sav. Bank Bldg.

San Diego.—Baumgarten, K., 616 Tinken Bldg.
Brown, G. P., Box 1200.
Franck, A. C., 3807 Fourth St.
Franck, R. P., Citrus Soap Co.
Rader, C. I., Builders Exch.
Wolf, M. Y., 1748 Beach St.
Wood, L. S., 626 Tinken Bldg.

San Francisco.—Anderson, W. G., 2255 Fillmore St.
Ashton, F., City Hall.
Bain, H. F., 420 Market St.
Bishop, R. N., Alaska-Commercial Bldg.
Boalich, C. S., Ferry Bldg.
Bradley, F. W., Crocker Bldg.
Bradley, P. R., 1023 Crocker Bldg.
Brandes, J. F., 260 California St.
Brayton, C. C., 311 California St.
Bretherton, S. E., Mills Bldg.
Brewer, A. K., 1408 Baker St.
Browne, H. L., 1412 Willard St.
Burch, A., Crocker Bldg.
Caetani, G., Crocker Bldg.
Carrigan, A., Box 449.
Cheyney, S. W., 237 First St.
Clark, F., 410 Hearst Bldg.
Cleveland, N., Alaska-Commercial Bldg.
Cohen, H. A., 2218 Clay St.
Connor, S. B., Mills Bldg.
Cornish, H. L., 54 Natoma St.
Cottrell, F. G., 506 U. S. Custom House.
Cranston, R. E., 819 Mills Bldg.
Crawford, J. J., Bohemian Club.
Dakin, F. H., Jr., 110 Sutter St.
Davis, W. J., Jr., 720 Rialto Bldg.
De Armond, C. F., 519 Metropolis Bank Bldg.
Deidesheimer, P., 2808 Clay St.
Dennis, C. G., 1022 Crocker Bldg.
Dennis, F. J., Crocker Bldg.
Doble, W. A., 19th and Harrison Sts.
Drum, F. G., 704 West Coast Life Bldg.
Finletter, J. R., St. Francis Hotel.
Foucar, E. L., 512 Folsom St.
Greene, L. H., 560 Powell St.
Griffin, F. W., 506 Alaska-Commercial Bldg.
Griffin, M. E., 506 Alaska-Commercial Bldg.
Haas, H., 524 Merchants Exch. Bldg.
Haehl, H. L., 1314 Humboldt Bank Bldg.
Hamilton, W. R., 502 Insurance Bldg.
Hammon, W. P., Alaska-Commercial Bldg.

San Francisco.—Continued.
Hanks, A. A., 630 Sacramento St.
Henry, J. L., 693 6th Ave.
Hoaas, O. G., Box 682.
Howe, A. S., Mills Bldg.
Hutchinson, E. C., 409 Montgomery St.
Hutchinson, J. H., 702 Mutual Sav. Bk. Bldg.
Innes, M., 218 Kohl Bldg
Janin, C., 620 Kohl Building.
Julihn, C. E., 281 Natoma St.
Kerr, M. B., Mills Bldg.
Kimball, E.B., 1205 Alaska-Commercial Bldg.
King, F. G., Monadnock Bldg.
Knapp, S. A., 235 Montgomery St.
Kuryla, M. H., 143 Second St.
Landers, W. H., 2400 Van Ness Ave.
Landfield, J. B., Crocker Bldg.
Lindley, C. H., 604 Mills Bldg.
Lindsay, L., Crocker Bldg.
McClure, D., 409 Montgomery St.
McGinnis, R. B., Mills Bldg.
Martin, F. O., 512 U. S. Custom House.
Merrill, C. W., 143 Second St.
Mills, L. D., 143 Second St.
Moran, R. B., 311 California St.
Morris, F. L., 1057 Monadnock Bldg.
Muir, T. K., 57 Post St.
Munro, C. H., 1057 Monadnock Bldg.
Murdoch, C. R., 343 Bush St.
Myrick, C. M., 2709 Pine St.
Newman, M. A., 839 Mills Bldg.
Noyes, W. S., 819 Mills Bldg.
Nutter, E. H., Merchants Exchange Bldg.
Oliver, E. L., 503 Market St.
Osmont, V. C., 517 Monadnock Bldg.
Paymal, G. W., 1621 Vallejo St.
Postlethwaite, R. H., Risdon Iron Wks.
Putnam, B, R., 651 Howard St.
Radford, W. H., 2360 Broadway.
Ralston, W. C., 905 Royal Insurance Bldg.
Read, T. T., 420 Market St.
Reading, R. W., 5 Pioneer Pl.
Requa, M. L., 1023 Crocker Bldg.
Richards, H. De C., Crocker Bldg.
Roote, G. J., Russ Bldg.
Rosenfeld, L., Merchants Exchange.
Rudra, S. C., 2963 Webster St.
Schlacks, C. H., 929 Mills Bldg.
Schorr, R., Postal Telegraph Bldg.
Scott, E. H., 517 Crocker Bldg.
Short, F. R., 1057 Monadnock Bldg.
Simonds, E. H., 1108 Crocker Bldg.
Sizer, F. L., 812 Merchants Exch. Bldg.
Slosson, H. L., 265 Russ Bldg.
Smith, H. D., 619 Kohl Bldg.
Spiers, J., 834 Mills Bldg.
Stebbins, E. W., 819 Mills Bldg.
Turner, H. W., 708 Mills Bldg.
Voorheis, E. C., 162 Crocker Bldg.
Wagoner, L., 850 Union St.
Walker, W. L., 422 Wells-Fargo Bldg.
Wiel, S. C., 626 Merchants Exch. Bldg.
Williams, W. A., 814 Sharon Bldg.
Wiltsee, E. A., Pacific Union Club.
Wright, W. Q., 727 Merchants Exchange.
Yard, H. H., 606 Metropolis Bank Bldg.

San Jose.—Ryder, I. L., 555 S. 4th St.

Santa Barbara.—Johnston, F. L., 325 E. Anapamu St.

Santa Cruz.—Raht, A., Box 397.

Santa Monica.—Mathews, E. J., 1007 Hoge Bldg.
Schader, C. F., "Seaside Terrace."

Santa Paula.—Hardison, A. C.

Sausalito.—Cobb, W. L.
Wyatt, J. S., Box 9.

Shasta.—Cummins, H. O., Gold Leaf Mine.

Shawmut.—Woods, C.

Solvang.—Janin, L.

Soulsbyville.—Knox, R. C., Black Oak Dev. Co.

South Pasadena.—Doerr, A., 1632 Fletcher Ave.
Garnier, T. R., 1735 Mission St.
McDonald, S., 1955 Huntington Drive.

Stanford University.—Beckwith, H. T., Box 95.
Branner, J. C.
Crook, W. J., Box 985.
Folsom, D. M.
Newsom, J. F.
Young, H. W.

Stockton.—Ross, G. McM., Yosemite Club.

Sutter Creek.—Downs, W. E., Amador Elec. Ry. & Light Co.
Ross, J., Jr., Wildman Synd.
Schrader, G., Box 5.

Tuolumne.—Elmer, J. M., United Mines Corp.
McClintock, W. H.
Woodward, W. M. H.

Upland.—Woodbridge, T. R.

Visalia.—Small, G. W.

Weaverville.—Bouëry, P., Lagrange Min. Co.

Willits.—Brown, A. H., "Walnut Grove Ranch."

Willows.—Mills, E. C.

Winthrop.—Hanley, H. R., Bully Hill Cop. Min. & Smelt. Co.
Keating, J. B., Bully Hill Mines.

CANAL ZONE.

Corozal.—Tinsley, R. B.

Gatun.—Porter, R. S., Isthmian Canal Com.

COLORADO.

Alice.—Smith, H. de W.

Aspen.—Brown, D. R. C.
Hare, A. W., Box 381.
Smillie, S.

Boulder.—Clerc, F. L.
George, R. D., Univ. of Colorado.
Harlow, W. P., 541 Highland Ave.
Prince, E., 1841 Athen St.

Bowie.—Bowie, A.

Breckenridge.—Revett, B. S., Reliance Gold Dredging Co.

Canon City.—Wells, J. S. C.

Central City.—Bayles, F. P.
Fleschhutz, J. C.
Lowe, H. P.

Colorado Springs.—Blomfield, A. L., Golden Cycle Mining Co.
Davis, F. S.
Hawkins, J. D., U. S. Reduc. & Refin. Co.
Hawkins, J. T., Box 563.
Lunt, H. F., Gazette Bldg.
MacNeill, C. M., U. S. Reduc. & Refin. Co.
Milliken, J. T., 1615 N. Cascade Ave.
Ritter, E. A., 1712 N. Nevada Ave.
Strieby, W., 805 N. Cascade Ave.
Van Diest, E. C., Box 826.
Woods, F. M., 200 Min. Exch. Bldg.

Cripple Creek.—Arthur, E. P., Jr., Bi-Metallic Bank.
Carlton, A. E.
Starkweather, H., 330 E. Eaton Ave.
Willis, F. G., Box 1119.

Denver.—Amsden, O. B., 325 E. Iliff Ave.
Anderson, A. E., Central Sav. Bank Bldg.
Argall, P., 1st National Bank Bldg.
Bancroft, G. J., 222 McPhee Bldg.
Bancroft, H., 730 Symes Bldg.
Beeler, H. C., First National Bank Bldg.
Berger, W. F. B., 825 Symes Bldg.
Blake, D. E., 1029 Corona St.
Booth, H. M., Majestic Bldg.
Bosco, F. W., 1834 S. Sherman Ave.
Bostwick, F. H., 611 Ideal Bldg.
Boyd, A. H., 1415 18th St.
Browne, A. B., 1572 Fillmore St.
Brunton, D. W., 730 Symes Bldg.
Bulkley, F., 830 Equitable Bldg.
Burlingame, W. E., 1736 Lawrence St.
Callbreath, J. F., Jr., 725 Majestic Bldg
Carnahan, C. T., 36th and Wazee Sts.
Cazin, F., McPhee Bldg.
Chase, C. A., 733 First National Bank Bldg
Chase, E. E., 1159 William St.
Chauvenet, R., 907 Equitable Bldg

Denver.—Continued.
Chedsey, W. R., 1414 Gaylord St.
Cohen, L., 230 First National Bank Bldg.
Colburn, C. L., 614 Ideal Bldg.
Collins, G. E., 420 Boston Bldg.
Comstock, C. W., 213 Boston Bldg.
Cox, W. J., 304 Boston Bldg.
Darby, T. L., 211 Continental Bldg.
Dewey, C. E., 1213 First National Bank Bldg.
Disbrow, W. F., 1108 Foster Bldg.
Dodge, D. C.
Dorr, J. Van N., 733 First National Bank Bldg.
Dumont, J. M., 1434 Humboldt St.
Durrell, C. T., Box 631.
Dwelle, J. E., 703 Symes Bldg.
Edwards, J. W., 318 14th St.
Esselstyn, J. N., 2330 Downing Ave.
Farish, F. G., 603 Colorado Bldg.
Finch, J. W., 730 Symes Bldg.
Foster, E. LeN., The Perrenoud.
Foster, G. C., 521 E. 18th St.
Garvin, C. J., 1744 Broadway.
Gilchrist, J. D., 1405 Downing St.
Grant, R. J., 815 E. & C. Bldg.
Gross, J., 709 Equitable Bldg.
Haggott, W. A., 1271 Marion St.
Hall, N. G., Denver Club.
Hallett, S. I., 847 Pearl St.
Hastings, J. B., 1018 Adams St.
Hawkins, E. N., 406 Boston Bldg.
Henderson, C. W., 313 Chamber of Commerce.
Hills, V. G., 318 McPhee Bldg.
Holt, M. B., 820 Gaylord St.
Hoskin, A. J., 1822 First National Bank Bldg.
Ionides, S. A., 929 Foster Bldg.
Jenks, T. H., 518 McPhee Bldg.
Johnston, F., 22 Sherman Ave.
Kennedy, G. A., 2741 Boulevard F.
Knowles, S. A., 1443 Milwaukee St.
Le Wald, E. A., 504 Empire Bldg.
Livingstone, C. H., 1234 Humboldt St.
MacCarthy, M. S., 2045 Birch St.
McClave, J. M., 601 Ideal Bldg.
McDaniel, A. K., 111 W. 4th Ave.
McMahan, C. H., 1217 Adams St.
Miller, D. G., 1336 Gaylord St.
Moore, C. J., 741 Equitable Bldg.
Morley, F. H., 734 Symes Bldg.
Morse, B. P., 1801 Lawrence St.
Noble, L. S., 930 Equitable Bldg.
Norman, J. E., 302 Mining Exchange.
Parker, R. A., 929 Foster Bldg.
Perry, J. G., Gas and Electric Bldg.
Platt, E. H., 730 Symes Bldg.
Porter, J. A., Denver Club.
Proske, T. H., Box 1443.
Prout, J. W., Jr., 2511 W. 32d Ave.
Rambo, W. C. J., 923 First Natl. Bank Bldg.
Richards, J. W., 1118 19th St.
Rickard, F., 508 Equitable Bldg.
Roberts, J. C., 1225 Emerson St.
Robeson, J. H., 512 Ideal Bldg.
Roeser, F., American Smelt. and Refin. Co.
Sanderson, H. S., 235 Foster Bldg.
Sayre, H., 815 Logan Ave.
Scobey, J. C., 3424 Colfax Ave., "B."
Sears, M. A., 712 E. & C. Bldg.
Sebben, E. W., 1331 Humboldt St.
Stearns, T. B.
Stoiber-Rood, L. A., 1022 Humboldt St.
Swart, W. G., 1118 Foster Bldg.
Taylor, F. M., 730 Symes Bldg.
Thomas, C. S., Jr., 730 Symes Bldg.
Titsworth, F. S., 404 Equitable Bldg.
Toll, R. H., 410 Boston Bldg.
Vaile, J. F., 420 Equitable Bldg.
Ward, W. F., 416 E. & C. Bldg.
Whitaker, O. R., 932 Equitable Bldg.
Wiard, E. S., 417 Boston Bldg.

Durango.—Gilbert, F. C., Am. S. & R. Co.

Eureka.—Martin, S. G., Franco-Colo. Mines.

Golden.—Munroe, H. S.
Myers, J. W., No. American S. & M. Co.
Schneider, G. W.
Traphagen, F. W., Colo. School of Mines.
Vidler, R. C.

Hotchkiss.—Miller, C. W.

Idaho Springs.—Kimball, G. K., Jr., Box 4.
May, J. J.
Morton, R. B., Tropic Mining Co.
Renshaw, W. E., Cons. Gem Mine & Newton Conc. Works.
Underhill, J.

Wolf, H. J., Stanley Mines.

Independence.—Nagel, H. P., Jr., Vindicator G. M. Co.

Lake City.—Thatcher, W. A.

Leadville.—Davis, W. W., Yak M. M. & T. Co.

Newmire.—Redfern, A. M., Primos Chem. Co.

Ouray.—Barnhart, G. H., Box 1012.
Carney, H. J.
Wilfley, C. R., Bristow Mine.

Pueblo.—Rose, C. R., United States Zinc Co.

Redstone.—Osgood, J. C.

Silver Cliff.—Thayer, H. S., Gladstone Red. Co.

Silverton.—Barry, J.
Brice, R. A., Ross Min. & Mill. Co.
Clapp, L. R., Silver Lake Mines.
Dyson, J., 1437 Reese St.
Harrison, A. W., Box 129.
Walter, E. W.

Smuggler.—Batcheller, J. H., Tomboy G. M. C.
Holland, L. F. S., Smuggler Union Min. Co.
Holt, H. L., Tom Boy G. M. Co., Ltd.

Steamboat Springs.—Pritchett, C. W., Jr.

Telluride.—Bell, C. N., First Nat. Bk. Bldg.
Elliott, R. H., Liberty Bell G. M. Co.
Lay, H. C., Box 156.
Livermore, T. L., Jr.
Logan, S. R., Utah Power & Light Co.
Minsch, W. C., Liberty Bell Club.
Staver, W. H., Liberty Bell G. M. Co.
Taft, T. K., Box 483.
Wells, B.
Wilson, A. M., Box 282.

Trinidad.—Schofield, W. D., Mine Safety Car No. 2.
Thompson, J. S., Colo. F. & I. Co.

Victor.—Brown, H. S.
Eads, N. E., Doyle Block.
Smale, F. L., 314 S. Fifth St.
Valentine, M. R., Box 281.

CONNECTICUT.

Branford.—Hammer, A. E., Malleable Iron Fittings Co.
Jameson, A. H.

Bridgeport.—Carter, H. M., 202 John St.
Sperry, E. S., 260 John St.
Wilcox, G., Fletcher Engrg. Co.

Danbury.—Buck, V. B., Jr.

Glastonbury.—Treat, L. B., R. F. D. 1.

Hartford.—Johnson, W. McA., 39 Vernon St.
Loomis, B.

Litchfield.—Blake, F. H., Falcon's Flight Farm.

New Haven.—Bahney, L. W., Yale Sta.
Du Bois, A. J.
Irving, J. D., Sheffield Sci. School.
McClelland, J. F., Drawer C, Yale Sta.
Newberry, R. W., 615 Orange St.
Roe, J. W., Sheffield Scientific School.
Russell, E. H., Box 496.
Storrs, L. S., The Connecticut Co.
Warner, R. K., Box 881, Yale Sta.
Wells, H. L., Sheffield Sci. School.
Whitney, E., 800 Whitney Ave.

Norwich.—Mac Kay, H. S., Mac Kay Copper Process Co.

South Norwalk.—Swartz, C. C.

Southport.—Sturges, C. B.

Stamford.—Semple, C. C., 393 Summer St.

Wallingford.—Canby, R. C., 334 S. Main St.

Waterbury.—Bassett, W. H., Am. Brass Co.
Goss, E. O., Scovil Mfg. Co.

West Haven.—Nason, F. L., Lock Box 6.

DELAWARE.

Wilmington.—Du Pont, T. C.
Griffiths, H. B., 2105 Boulevard.
Haskell, H. G., Repauno Mfg. Co.
Moxham, A. J., du Pont Bldg.
Street, G. B., du Pont Powder Co.

DISTRICT OF COLUMBIA.

Washington.—Ashley, G. H., U. S. Geol. Survey.
Becker, G. F., U. S. Geol. Survey.
Boutwell, J. M., U. S. Geol. Survey.
Brooks, A. H., U. S. Geol. Survey.
Brown, W. N., 710 Southern Bldg.
Burchard, E. F., U. S. Geol. Survey.
Campbell, M. R., U. S. Geol. Survey.
Carr, H. C., The Woodward.
Chapman, R. H., U. S. Geol. Survey.
Chatard, T. M., 1716 Rhode Island Ave.
Darton, N. H., U. S. Bureau of Mines.
Davis, J. A., U. S. Bureau of Mines.
Day, D. T., U. S. Geol. Survey.
Dewey, F. P., U. S. Mint.
Emmons, W. H., U. S. Geol. Survey.
Evans, S. G., 1224 Fairmount St., N. W.
Fay, A. H., U. S. Bureau of Mines.
Fenner, C. N., Geophysical Laboratory.
Ferguson, H. G., U. S. Geol. Survey.
Gilbert, G. K., U. S. Geol. Survey.
Hague, A., U. S. Geol. Survey.
Hance, J. H., 2312 17th St., N. W.
Harden, E. B., Isthmian Canal Commission.
Harder, E. C., U. S. Geol. Survey.
Hess, F. L., U. S. Geol. Survey.
Hewett, D. F., U. S. Geol. Survey.
Holmes, J. A., U. S. Bureau of Mines.
Jenney, W. P., 1763 Q St., N. W.
Jennings, H., 2221 Massachusetts Ave.
Lucas, A. F., 1406 16th St., N. W.
McCaskey H. D., U. S. Geol. Survey.
McKenna, A. G., Hamilton Road.
Mills, K., 1305 10th St., N. W.
Morris, H. C., The Wyoming.
Munroe, C. E., Columbian Univ.
Newell, F. H., Reclamation Service.
Parker, E. W., U. S. Geol. Surv.
Phalan, W. C., U. S. Geol. Survey.
Pinchot, G., 1615 Rhode Island Ave., N. W.
Ransome, F. L., U. S. Geol. Survey.
Reinholt, O. H., U. S. Bureau of Mines.
Schrader, F. C., U. S. Geol. Survey.
Siebenthal, C. E., U. S. Geol. Survey.
Smith, G. O., U. S. Geol. Survey.
Spencer, A. C., U. S. Geol. Survey.
Stanford, H. R., Navy Dept.
Steiger, G., U. S. Geol. Survey.
Sterrett, D. B., U. S. Geol. Survey.
Tyssowski, J., Box 37, R. F. D. 4.
Walcott, Charles D., Smithsonian Instn.
Williams, G. F., 2201 R St.
Willis, B., U. S. Geol. Survey.
Wright, C. A., U. S. Bureau of Mines.
Wright, F. E., Geophysical Laboratory.

FLORIDA.

Kissimmee.—Agnew, F. V.
Lakeland.—Memminger, C. G., Peninsula Pebble Phosphate Co.
Port Orange.—Reed, A. C.
St. Augustine.—Hoatson, J.

GEORGIA.

Atlanta.—Hall, B. M., 303 Peters Bldg.
McCallie, S. W.
Cartersville.—Granger, A. O.
Cedartown.—Graves, C. H.
Metasville.—Henrich, C.

IDAHO.

Atlanta.—Stevens, A. W.
Boise.—Bell, R. N.
Brown, F. C., R. F. D. 4.
Johnesse, F. E., 1820 N. 7th St.
Moore, F. C., State Mining Dept.
Sawyer, H.
Strohecker, J. W., 1301 N. 20th St.
Walker, E., Boston & Idaho Gold Dredging Co.
Bonanza—Oster, W. T.
Burke.—Murphy, E. M., Hecla Min. Co.
Rowe, F. S., Hecla Mine.
Caldwell.—Ferguson, C.
Clayton.—Englehardt, E. C., Idaho S. & M. Co.
De Lamar.—Orford, E. V.
Elk City.—Backus, G. S.
Gem.—Burley, C. R., Hecla Mining Co.
Morrow, B. S., Box 102.
Gilmore.—Nichols, R., Latest Out Mine.
Grangeville.—Hill, W. H.
Idaho City.—Fitzhugh, E. F., Idaho-Elkhorn Min. Co.
Kellogg.—Callaway, F. W., Bunker Hill & Sullivan M. & C. Co.
Easton, S. A., Bunker Hill & Sullivan M. & C. Co.
Gwinn, J. W., Box 421.
Huff, W. McM.
Sinclair, M. J.
Sterling, R., Bunker Hill & Sullivan M. & C. Co.
Landore.—Kleinschmidt, F. H., Blue Jacket Copper Co.
Larson.—Roddewig, G. W., Snow Storm Min. Co.
Lewistown.—Paterson, A. W., Am. Mines Co.
Riebling, H. F. A.
Mackay.—Leland, F. M., Empire Copper Co.
Montpelier.—Taylor, J. J., Box 87.
Moscow.—De Lury, J. S., Univ. of Idaho.
Jenkins, F., Univ. of Idaho.
McCaffery, R. S.
Stewart, C. A., University of Idaho.
Mullan.—Coumerilh, W.
Dalton, M. P.
Nampa.—Babbitt, T. D.
Parma.—Steel, A. A.
Port Hill.—Gannon, M. H., Idaho-Continental Mines.
Twin Falls.—Easley, G. R. D., Hotel Perrine.
Ulysses.—Edwards, R. L.
Wallace.—Collins, G. A., Idoha Hill Mining Co.
Greenough, W. E.
Hall, W. J., Federal M. & S. Co.
Hofstrand, O. B.
McCarthy, J. F., Hecla Mining Co.
McKinnis, C.
Miller, W. C., Federal Min. & Smelt. Co.
Tefft, L. J., Care O. A. Olsson.
White, R. J., Federal Min. & Smelt. Co.
Wilson, J. B.
Wilson, R., Mammoth Min. Co.
Wright, J. T.
Wardner,—Metcalf, F. A., Last Chance Mine.

ILLINOIS.

Aurora.—McKee, J. A., 75 S. Root St.
Champaign.—Willis, H. T.
Chicago.—Amsden, F. F., Federal Furn. Co.
Baird, G. A., 1430 Corn Exchange Bk. Bldg.
Bement, A., 206 So. La Salle St.
Billin, C. E., 2632 Lake View Ave.
Chalmers, T. S., Commercial Nat. Bk. Bldg.
Chalmers, W. J., Commercial Nat. Bk. Bldg.
Clark, H. H., 208 S. 43d Ave.
Cleveland, G. A., 240 Wabash Ave.
Coolidge, W. G., 310 Western Union Bldg.
Copeland, F. K., 413 People's Gas Bldg.
Cunniff, B., 1121 Munroe Bldg.
Damon, G. G., 5748 Kimbark Ave.
Davidson, G. M., Chic. & NW. Ry. Co.
Davis, J. C., Commercial Nat. Bank Bldg.
Delano, F. A., 515 Western Union Bldg.
Dickman, R. N., 1140 Rookery.

Chicago.—Continued.
Forsyth, R., 1159 The Rookery.
Franke, E. A., 914 Lakeside Place.
Gennet, C. W., Jr., 2200 Insurance Exchange Bldg.
Gillette, H. P., 608 S. Dearborn St.
Gritzner, F. H., 1221 E. 63d St.
Hagar, E. McK., 72 W. Adams St.
Hollis, H. L., First Natl. Bank Bldg.
Hoskins, W., 2009 Harris Trust Bldg.
Hunt, R. W., 2200 Ins. Exch. Bldg.
Kaeding, H. B., 735 E. 50th St.
Lavery, V. M., 1113 McCormick Bldg.
Lihme, C. B., 1350 N. State St.
Linn, W. J., 2629 Michigan Ave.
McKay, H., 203 S. Dearborn St.
Malcolmson, C. T., Old Colony Bldg.
Metzger, W. G. 54 E. Division St.
Mohr, L., 349 W. Illinois St.
Nichols, H. W., Field Columbian Museum.
Potter, E. C., 4334 Drexel Blvd.
Pulsifer, H. B., Armour Inst. of Technology.
Reeder, E. C., 1917 Fisher Bldg.
Robinson, T. W., Comml. Natl. Bk. Bldg.
Rose, G. E., 6017 Kimbark Ave.
Scholz, C., 139 W. Van Buren St.
Simington, F. J., 516 Stock Exchange.
Snyder, F. T., Monadnock Bldg.
Tratman, E. E. R., 1144 Monadnock Bldg.
Van Arsdale, W. H., Hotel Windermere.
Van Valkenburg, R. D., 620 N. State St.
Whittier, C. C., 2200 Ins. Exch. Bldg.
Wolf, A. H., 10 So. La Salle St.
Wright, E. T., 1730 1st Natl. Bank Bldg.
Collinsville.—Holding, C., St. Louis Smelt. & Refin. Co.
Danville.—Hegeler, J. W., 203 N. Hazel St.
Depue.—Brooks, G. S., Mineral Pt. Zinc Co.
Evanston.—Grant, U. S., Northwestern Univ.
Galena.—McNeill, H. T., 420 Dewey Ave.
Granite City.—Bull, R. A., Commonwealth Steel Co.
Highland Park.—Merryweather, G., Park Lane.
Truax, S., Care W. C. Egan.
Lacon.—Scholz, O. F.
La Salle.—Ede, J. A.
Matthiessen, F. W., 1127 Ninth St.
Lawrenceville.—Piper, J. S., Indian Refining Co.
Peru.—Noon, T. F., Illinois Zinc Co.
Rochelle.—Whitcomb, G. D., G. D. Whitcomb Co.
Rock Island.—Dart, A. C.
South Chicago.—Brassert, H. A., Illinois Steel Co.
Divine, R. D., Am. Smelt. & Refin. Co.
Newton, P. A., Illinois Steel Co.
Osborne, C. G., Illinois Steel Co.
Stillman, C. A., Iroquois Iron Co.
Urbana.—DeWolf, F. W., State Geological Survey.
Lincoln, F. C., Univ. of Illinois.
Stoek, H. H., Univ. of Illinois.
Williams, R. Y., 803 S. Lincoln Ave.

INDIANA.

Hammond.—Ruetschi, R., Box 626.
Indiana Harbor.—McKee, W. C., South Bay Hotel.
Thropp, J. E., Jr., 3318 Aldis Ave.
Van Buren.—Nawatny, W. F.

IOWA.

Ames.—Beyer, S. W., Iowa State College.
Buxton.—Jorgensen, F. F., Consolidation Coal Co.
Charles City.—Webster, C. L., 111 Hawkins Ave.
Clinton.—Upton, G. B.
Dallas.—Reece, P. P.
Davenport.—Emeis, W. A., 120 Oneida Ave.
Griggs, T. W., Security Investment Co.
Des Moines.—Keyes, C. R., 944 Fifth St.
Parrish, K. C., 1822 Ingersol Ave.
Dubuque.—Day, W. H., Jr.
Iowa City.—Burt, C. S., 936 S. Summit St.
Keokuk.—Cooper, H. L.
Parsons, B. H., Mississippi River Power Co.

KANSAS.

Lawrence.—Young, C. M., 1227 Ohio St.
Topeka.—Macomb, J. de N., Jr., A. T. & S. F. R. R. System.

KENTUCKY.

Ashland.—Kemler, W. H.
Earlington.—Rash, F. D.
Harlan.—Duffield, W. W.
Jenkins.—Smyth, J. G., Consolidation Coal Co.
Lexington.—Easton, H. D., 430 Transylvania Park.
Fohs, F. J., 416 Rose Lane.
Norwood, C. J., State Univ.
Lily.—Lewis, G., Box 2.
Louisville.—Macfarlane, G., 1401 Lincoln Bldg.
Miller, E. T., 414 W. St. Catherine St.
Marion.—Masters, H. K., Ohio Valley Fluor Spar Co.
Middlesboro.—Bartlett, J. H., American Asso., Inc.
Finley, W. H.
Pineville.—Connér, H. McK., Continental Coal Corpn. Inc.
Stearns.—Butler, J. E.
Wallsend.—Yeager, H. M., Continental Coal Corpn.

LOUISIANA.

New Orleans.—Stanford, R. B., 206 Metropolitan Bank Bldg.
Shreveport.—Norton, E. G., 212 Milam St.

MAINE.

Bangor.—Farrar, B. L., 352 Centre St.
Calais.—Cox, H. B.
Rumford.—Griffin, M. L., Oxford Paper Co.

MARYLAND.

Baltimore.—Bassler, H., 1421 McCulloh St.
Clark, W. B., Johns Hopkins Univ.
Fitzgerald, J. M., Continental Trust Bldg.
Peirce, W. H., P. O. Sta. J.
Singewald, J. T., Jr., 17 W. 29th St.
Whiteley, J. S., Continental Trust Bldg.
Cumberland.—Perry, W. C., Davis Coal & Coke Co.
Shriver, H., U. S. Rail Co.
Frostburg.—Hesse, H. V., Consolidation Coal Co.
Sparrows Point.—Bent, Q., Maryland Steel Co.
Wood, F. W., Maryland Steel Co.

MASSACHUSETTS.

Acton.—Crooker, R.
Amherst.—Ostrander, J. E., Mass. Agricultural College.
Boston.—Billings, G. H., 393 Dorchester Ave.
Brown, D., 185 Summer St.
Bugbee, E. E., Mass. Inst. of Technology.
Crawford, W. H., 52 Astor St.
Crosby, W. O., Mass. Inst. of Technology.
Dickerman, A. L., 70 State St.
Drake, F., 79 Milk St.
Eustis, A. H., 131 State St.
Eustis, F. A., Box 1422.
Eustis, W. E. C., 131 State St.
Eveland, A. J., 60 Congress St.
Geiger, A. W., 87 Milk St.
Hill, C. R., 161 Bay State Rd.
Hofman, H. O., Mass. Inst. of Technology.
Hutchinson, W. S., 8 Congress St.
Jaques, W. H., Hotel Puritan.
Jewett, F., 45 Milk St.

Boston.—Continued.
Keedy, D. V., 6 Beacon St.
Lindgren, W., Mass. Inst. of Technology.
Lindsley, H., 60 State St.
Locke, C. E., Mass. Inst. of Technology.
Mitchell, W. S., 60 State St.
Oakes, F. J., Jr., 141 Milk St.
Paine, F. W., 409 Commonwealth Ave.
Paine, W. A., 82 Devonshire St.
Playter, F., 205 Hemenway St.
Richards, R. H., Mass. Inst. of Technology.
Rogers, A. H., 201 Devonshire St.
Sharp, W. G., 55 Congress St.
Sharples, S. P., 26 Broad St.
Smith, C. S., 50 Congress St.
Sprague, T. W., 88 Broad St.
Sweet, H. N., 63 Mt. Vernon St.
Tudor, J. W., 35 Congress St.
Wenstrom, O., 53 State St.
Wentworth, H. A., 60 India St.
Williams, H. J., 161 Tremont St.
Winslow, A., 131 State St.
Brookline.—Bergen, R. C., 60 Park St.
Fisher, H., 19 Orkney Rd.
May, A. E., 465 Washington St.
Schwarz, T. E., 106 Marion St.
Cambridge.—Graton, L. C., Geological Museum.
Leavitt, E. D., 33 Garden St.
Raymer, G. S., 51 Brattle St.
Reinhardt, G. A., Rotch Bldg.
Sauveur, A., Harvard Univ.
Weeks, W. S., 5 Gray's Hall.
White, C. H., Rotch Bldg.
Dorchester.—Peters, E. D., 38 Percival St.
Everett.—Morse, R. G., Mass. Steel Casting Co.
Gloucester.—Turgeon, F. N., 7 Commonwealth Ave.
Groton.—Christiansen, A. O.
Lynn.—Snow, F. W., 17 Franklin St.
Marblehead.—Carleton, J. G., 4 Gregory St.
Litchman, H. B., 10 High St.
Mattapan.—Heimer, P. H., 498 Norfolk St.
Milton.—Brewer, R. E., Hinckley Rd.
Newburyport.—Cutting, C. H., 329 High St.
Newton.—Wallace, R.
North Adams.—Locke, F. B.
Northampton.—Gaylord, F. B., 58 Pomeroy Terrace.
Pittsfield.—McDevitt, J. E., 14 Taconic St.
Plymouth.—Griswold, L. S.
Quincy.—Hayward, C. R., 233 Goffe St.
Roxbury.—Pearse, J. B., 317 Walnut Ave.
Schiertz, F. A., 58 Cedar St.
Springfield.—Hewett, G. H., 707 State St.
Tufts College.—Durkee, F. W.
Lane, A. C.
Watertown.—Smyth, H. L., Belmont St.
West Newton.—Trowbridge, W. W., 40 Cross St.
West Wareham.—Leonard, W. A., Tremont Nail Co.
Tobey, H. P., Tremont Nail Co.
Winthrop.—Williams, S. H., 23 Somerset St.
Worcester.—Daniels, F. H., 214 Salisbury St.
Dietz, C. F., 8 Westland St.
Edwards, V. E., Morgan Construction Co.
Gordon, L. F., Wyman & Gordon Co.
Jeppson, G. N., Norton Emery Wheel Co.

MICHIGAN.

Alpena.—Hindshaw, H. H., 254 Washington Ave.
Ann Arbor.—Campbell, E. D., 1555 Washtenaw Ave.
Atlantic Mine.—Edwards, A. D., Atlantic Min. Co.
Bessemer.—McRandle, W. E.
Birmingham.—Lasier, F. G.
Calumet.—MacNaughton, J., Calumet and Hecla Mines.
Detroit.—Alden, H. W., 33 Warren Ave. E.
Bailie, R. L., 32 Warren Ave. E.
Banks, N. C., Blvd. & Chene Sts.
Courtis, W. M., 338 Merrick Ave.
Gerhauser, W., 810 Penobscot Bldg.

Detroit.—Continued.
Green, A. H., Jr., Solvay Process Co.
Keep, W. J., 753 Jefferson Ave.
Lane, H. M., 18 Piquette Ave. E.
Russel, W. S., Russel Wheel & Foundry Co.
Sanders, J. D., Solvay Process Co.
Stringham, J. S., 800 Union Trust Bldg.
Wilkins, W., 423 Penobscot Bldg.
Dollar Bay.—Conant, H. D., Lake Superior Smelting Co.
Taylor, H. B.
Hancock.—Macdougal, C. W., Hancock Cons. Min. Co.
Houghton.—Cairns, F. I.
Chynoweth, B. F.
Edwards, R. M.
Fox, A. C., with A. P. Silliman.
Henderson, E.
Hodge, W. R., 134 College Ave.
Hopper, W. E., Mich. College of Mines.
Hore, R. E., Mich. College of Mines.
Hubbard, L. L., Winona Copper Co.
McNair, Fred. W., Mich. College of Mines.
Sperr, F. W., Mich. College of Mines.
Uren, W. J., 124 College Ave.
Van Orden, F. L.
Hubbell.—Cooper, J. B., Calumet & Hecla Smelter.
Heath, G. L., Calumet & Hecla Co.
Ladd, D. H., Care J. B. Cooper.
Iron Mountain.—Brown, E. F., Pewabic Co.
Davidson, O. C., Oliver Iron Mining Co.
Jones, J. T.
Lawrence, C. E.
Iron River.—Waeber, G. R.
Whiting, L.
Ironwood.—Brewer, C., Cleveland Cliffs Iron Co.
Higgins, E., U. S. Bureau of Mines.
Vallat, B. W., Newport Min. Co.
Ishpeming.—Duncan, M. M., Cleveland Cliffs Iron Co.
Eaton, L., Moro & Salisbury Mines.
Jopling, J. E., Cleveland Cliffs Iron Co.
La Croix, M. F.
Stakel, C. J., Cleveland Cliffs Iron Co.
White, E. E., Cleveland Cliffs Iron Co.
Yungbluth, A. J.
Lansing.—Hedges, J. H.
Loretto.—Baxter, C. H., Loretto Iron Co.
Mancelona.—Langdon, N. M., Antrim Iron Co.
Murphy, S. E., Lock Box 68.
Marquette.—Breitung, E. N., Savings Bank Bldg.
Cummings, G. P.
Dunster, C. B.
Farrell, A., Pioneer Iron Co.
Kaufman, H. L.
Way, K. M., Care Crowell & Murray.
Mass City.—Walker, E. W., Mass Cons. M. Co.
Mount Clemens.—Snover, G. R.
Negaunee.—Elliott, S. R., Cleveland Cliffs Iron Co.
Painesdale.—Denton, F. W.
Mercer, H. T.
Princeton.—Jackson, G. R.
Meyer, W. R., Cleveland Cliffs Iron Co.
Redridge.—Sawyer, A. H., Baltic Mining Co.
Republic.—Siebenthal, W. A.
Saginaw.—Hill, R. R., 504 Bearinger Bldg.
Linton, R. A.
Senter.—Maynard, E. W., Atlas Powder Co.
Vulcan.—Kelly, W., Penn Iron Mining Co.
Wells.—Stephenson, G. T., Mashek Chemical & Iron Co.
Winona.—Seeber, R. R.

MINNESOTA.

Aurora.—Merrill, P. C., Longyear Mesaba L. & I. Co.
Brainerd.—Barrows, W. A., Jr.
Zapffe, C., Box 93.
Buhl.—McCormick, E.
Coleraine.—Salsich, Le R., Oliver I. Min. Co.

Deerwood.— Adams, C., Cuyana & Iron Range Ry. Co.
Duluth.—Agnew, W. C., 1925 E. First St.
Andrews, C. W., Zenith Furnace Co.
Cole, T. F., 1400 Alworth Bldg.
Collins, E. J., 1008-9 Torrey Bldg.
Cramer, F., Marshall-Wells Hdw. Co.
Dudley, H. C., 807 Lonsdale Bldg.
Hovland, H. B., 403 Lonsdale Bldg.
Ireland, J. D., 701 Sellwood Bldg.
Kennedy, A. T., 1006 E. 3d St.
La Rue, W. G., 1503 Alworth Bldg.
Mitchell, P., 605 Wolvin Bldg.
Munger, C. H., Lonsdale Bldg.
Olcott, W. J., Oliver Iron Min. Co.
Paddock, L. E., 1815½ E. Second St.
Rakowsky, V., Sellwood Bldg.
Roberts, H., Hale, Kanawha & Roberts Mines.
Sebenius, J. U., Wolvin Bldg.
Swift, G. D., 2320 E. First St.
Woodbridge, D. E., Providence Bldg.
Hibbing.— Agnew, J. C., Mahoning Ore & Steel Co.
Harrison, G. E., Corrigan, McKinney & Co.
Jewett, F. G., Care E. J. Longyear.
Oberg, A. C., Arthur Iron Min. Co.
Silliman, A. P.
Warren, O. B.
Wearne, W., Inland Steel Co.
McKinley.—Stewart, J. A., Elba Mine.
Minneapolis. — Appleby, W. R., Minn. School of Mines.
Bennett, R. M., 710 New Security Bldg.
Christianson, P., State University.
Crocker, A. L., 314 Nat. Bk. of Commerce Bldg.
Longyear, E. J., 710 Security Bank Bldg.
Lyman, F. W., 700 Oneida Block.
McCarty, E. P., Univ. of Minnesota.
Magnuson, M. G., 2002 Second Ave., S.
Soper, E. K., Univ. of Minn.
Van Barneveld, C. E., State Univ.
Warren, F. M., 3443 S. Irving Ave.
Warren, G. H., 3443 S. Irving Ave.
Winchell, H. V., 505 Palace Bldg.
Robbinsdale.—Tyler, A. P.
St. Paul.—Clarke, H., 775 Portland Ave.
Leacey, F. J., Northern Malleable Iron Co.
Virginia.—Kendall, H. F., N. Y. State Steel Co.
Ricks, G. A., Box 540.

MISSOURI.

Bevier.—Thomas, W. S., Care D. M. Thomas.
Bonne Terre.—Bell, A. D., St. Joseph Lead Co.
Parsons, R. R. S., St. Joseph Lead Co.
Carterville.—Houser, J. N., Am. Zinc, Lead & Smelt. Co.
Polhemus, J. H., Am. Zinc, Lead & Smelt. Co.
Carthage.— Lippincott, W. B., Mariposa Mining Co.
Desloge.—Desloge, F. V., Desloge Consolidated Lead Co.
Flat River.—Bilharz, O. M., Doe Run Lead Co.
Guess, H. A.
Ring, A. E., Federal Lead Co.
Fredericktown.—Hall, S. W., Madison Lead & Land Co.
Granby.—Perkins, E. T.
Herculaneum.—Smith, W. A., St. Joseph Lead Co.
Joplin.—Bruce, J. L., Box 83.
Cook, F. S.
Draper, J. C., Miners' Bank Bldg.
Landrum, C. W., 602 Keystone Bldg.
Playter, C. C.
Playter, G. H., United Zinc Cos.
Plumb, C. H., Keystone Bldg.
Symmes, O. R., 1615 Wall St.
Kansas City.—Malcolmson, J. W., 1012 Baltimore Ave.
Rivermines.—Adami, C. J.
Rolla.—Cox, G. H.
Young, C. D., Sigma-Nu House.
Springfield.—Nicholas, P., R. F. D. 7.
Shepard, E. M., 1403 Benton Ave.
St. Louis.—Barrell, R. W., 713 Clark St.
Block, H. W. C., 1804 Warren St.
Bush, B. F., Mo. Pac. R. R. Co.
Davis, F., 5024 Page Ave.
Donnewald, A. H., 3709 Finney Ave.
Ewing, C. G., St. Regis Apts.
Foote, E. L., 5833 Bartmer Ave.
Gatch, E. S., 1710 3d Natl. Bank Bldg.
Gazzam, J. P., 5027 Westminster Pl.
Goltra, E. F., La Salle Bldg.
Kimball, H. S., 1012 Pierce Bldg.
Kirby, E. B., 701 Security Bldg.
McAuliffe, E., 916 Frisco Bldg.
McCourt, W. E., Washington Univ.
McLure, C. D., 822 Security Bldg.
Miltenberger, G., 3758 W. Pine Blvd.
Moore, P. N., 611 Merchants Laclede Bldg.
Potter, W. B., 713 Clark St.
Robertson, J. D., 3815 Delmar Ave.
Schwarz, C. E., 6029 Maple Ave.
Sessinghaus, G., Central Natl. Bank Bldg.
Smith, S. K., 5541 Maple Ave.
Thacher, A., Roe Bldg.
Walsh, E. J., Mississippi Glass Co.
Wheeler, H. A., 510 Pine St.
Webb City—Orr, C. T., Providence Min. & Mill. Co.
Wallower, F. C.
Webster Grove.—Matlack, E. V., 515 Bompart Rd.

MONTANA.

Anaconda.—Barnard, E. A., Box 275.
Demond, C. D., 704 Main St.
Ellis, E. W., 423 Elm St.
Gallwey, H. A., B. A. & P. Ry. Co.
Laist, F.
Mathewson, E. P., Anaconda Cop. Min. Co.
Oliver, R. S., Box 328.
Welsh, H. L., Washoe Smelter.
Whyte, F. W. C., Amalgamated Copper Co.
Wiggin, A. E., 520 Maple St.
Basin.—Haley, D. F., Box 28
Lee, M. L., Box 71.
Billings.—Wheeler, S. K., R. F. D. 2, Box 114.
Bozeman.—King, E. W.
Butte.—Adams, J. C., Anaconda Copper Mining Co.
Bacorn, F. W., Cable Lease M. Co.
Bard, D. C., Mont. State School of Mines.
Barker, S., Jr., Barker & Wilson.
Bartlett, J. R., 553 Phœnix Bldg.
Bowman, C. H., 1020 Caledonia St.
Braly, N. B., 822 W. Silver St.
Christian, A., Anaconda Copper Mining Co.
Corry, A. V., 203 Lewishon Bldg.
Dunshee, B. H., Box 415.
Emmons, N. H., Box 584.
Fisher, W. B., Davis-Daly Copper Co.
Gillie, J., Anaconda Copper Mining Co.
Goodale, C. W., Anaconda Copper Min. Co.
Greene, F. T., Silver Bow Club.
Hammer, J. G., Butte Sewer Pipe & Tile Co.
Heinze, F. A.
Jenks, N. L., Box 46.
Kelley, C. F., Hennessey Bldg.
Leggat, A., Box 15.
Linforth, F. A., 626 Hennessey Bldg.
McArthur, R. A., 817 W. Silver St.
Mooney, J. D., Leonard Hotel.
Moulthrop, G. E., 805 W. Silver St.
Packard, G. A., Silver Bow Block.
Pope, J. D., Box 557.
Rohn, O., East Butte Copper Mining Co.
Sales, R. H., 524 Hennessey Bldg.
Siderfin, W. C., Box 1368.
Trauerman, C. J., Butte Central Copper Co.
Vivian, G. G., East Butte Copper Min. Co.
Warner, J. H., Pittsburg & Montana Cop. Co.
Wilson, E. H., Belmont Mine.
Chouteau.—Burrell, A.
East Helena.—Smith, F. M., Am. Smelt. & Refin. Co.
Gould.—Byrnes, O.

Great Falls.—Burns, W. T., B. & M. Cons. Cop. & Silver Min. Co.
Church, J. A., Jr., B. & M. Smelter.
Klepinger, J. H., B. & M. Redn. Wks.
Krejci, M. W., Anaconda Cop. Min. Co.
Kuzell, C. R., Anaconda Copper Min. Co.
Roberts, R. P., Boston & Montana Reduction Wks.
Scotten, F. C., Boston & Montana Co.
Wheeler, A. E., Anaconda Copper Min. Co.
Helena.—Dickerson, W., Box 329.
Scallon, W.
Wickes, G. T., The Montana Club.
Zimmerman, A. A., Box 704.
Lewistown.—Hamilton, T. M.
Libby.—Pratt, P. D.
Livingston.—Sackett, C. T.
Missoula.—Gardner, E. D., Forest Service.
Ingalsbe, F. R., Forest Service.
Phillipsburg.—Lucas, J. R.
Pony.—Morris, C. E., Morris & Flint.
Radersburg.—Graves, McD.
McIntire, R., Keating G. M. Co.
Washoe.—Brophy, J.
White Sulphur Springs.—Church, J. L.

NEBRASKA.

Omaha.—Manley, F. A., 1121 Union Pacific Bldg.
Page, W. T., Am. Smelt. & Refin. Co.

NEVADA.

Battle Mountain.—Liddell, T. P.
Pinkham, W. F.
Beatty.—Turner, A. A.
Blair.—Oddie, T. L.
Smith, L., Box 85.
Buckhorn.—Kidder, S. J., Pittsburg-Silver Peak G. M. Co.
Dayton.—Hamilton, A.
Ely.—Colwell, A. B., Box 135.
Millard, F. W.
Fairview.—Starr, C. C.
Fallon.—Putnam, D. G., R. F. D. 1.
Farrell.—Rohlfing, D. P.
Good Springs. — Johnson, A. T., Yellow Pine Min. Co.
Golconda.—Playter, J. H.
Goldfield.—Byler, E. A., Box 192.
Chambers, F. M., International S. & R. Co.
Downer, R. H., Downer Bros.
Dutton, C. E., Box 104.
Schuettenhelm, J. B.
Simpson, K. M., Box 565.
Thorn, J. F., Goldfield Cons. Mines Co.
Turner, J. K., Box 763.
Wilkinson, C. D., Daisy Min. Synd.
Kennedy.—Klopstock, P., Gold Note Min. & Mill. Co.
Kimberly.—Mills, F. P., Giroux Cons. Mines.
Ralph, E. W., Boston-Ely Min. Co.
Lovelock.—Reid, J. T.
Ludwig.—Emmel, R.
Manhattan.—Kitchen, C.
Mason.—Marshall, E. M.
Weck, C. A., Bluestone M. & S. Co.
Wolf, A. G., Mason Valley Mines Co.
McGill.—Lakenan, C. B.
Millers.—Patrick, W. B., Box 32.
Nelson,—Duncan, G. A.
Pioche.—Cosby, F. N.
Reno.—Davis, H., 752 N. Center St.
Siebert, F. J.
Warner, T., Hotel Golden.
Young, G. J., Univ. of Nevada.
Reveille.—Reischke, H.
Rhyolite.—Klamt, A. J.
Rockland Mine.—Schrader, E. J., Pittsburg-Dolores Min. Co.
Ruth.—Kellogg, R. M., Box 71.
Searchlight.—White, J. E., Quartette Mine.
Thompson.—Labarthe, J., Mason Valley Mines Co.
Tonopah.—Blackburn, W. H., Tonopah Mining Co.
Bradshaw, F., Tonopah-Belmont Dev. Co.
Carpenter, E. E.
Charles, W. W., Tonopah Mining Co.
Dodge, E. V., Box 93.
Ingersol, J. W., Box 504.
Jones, A. H., Belmont Milling Co.
Lawry, A. H., Montana-Tonopah Mining Co.
Marston, P. L., Box 826.
Parsons, A. R., Tonopah Mining Co
Richardson, W. V.
Sirdevan, W, H., Tonopah Mining Co.
Virginia City.—Boyle, E. D.
Lathrop, L. J.
Symmes, W.
Wonder.—Cunningham, E. S.
Yerington.—Sonne, O. H., Box H.

NEW HAMPSHIRE.

Hampton.—Locke, A.
Province Lake.—Mills, F. S.
Nashua.—Almy, W. F., Box 123.
Washington.—Batcheller, H. R., Box 21.

NEW JERSEY.

Atco.—Borowsky, A. G., Atco Metal Mfg. Co.
Bayonne.—Fudge, T., 32 W. 38th St.
Boonton.—Brock, C., Boonton Iron & Steel Co.
Bound Brook.—Ayres, E. L. C.
Bridgeton.—Coyle, J. A., Box 476.
Smith, O., Ferracute Machine Co.
Camden.—May, De C., New York Shipbuilding Co.
Chatham.—Moore, L. D.
Chrome.—Addicks, L.
Draper, R. M., Box 83.
Johnston, R. L., U. S. Metals Refining Co.
Rolle, S., U. S. Metals Refining Co.
Dover.—Canfield, F. A.
Howard, J. J., 389 W. Blockwell St.
Richards, H., Box 108.
Tonking, W. H.
Dunnfield.—Deshler, G. O.
Elizabeth.—Pluemer, A., 589 Westminster Ave.
Pyne, F. R., 525 Westminster Ave.
Franklin Furnace.—Catlin, R. M., N. J. Zinc Co.
McKaig, J. S., N. J. Zinc Co.
Tillson, B. F., N. J. Zinc Co.
Gloucester City.—Miner, H. S., Welsbach Light Co.
Hibernia.—Munson, A.
High Bridge.—Hummell, A. S.
Le Boutillier, C., Taylor I. & S. Co.
Taylor, K., Taylor I. & S. Co.
Hoboken.—Lauder, G., Home Trust Co.
Jersey City.—Haasis, A. L., Jos. Dixon Crucible Co.
Neustaedter, A., 238 Virginia Ave.
Mahwah.—Sargent, F. W., Am. Brake Shoe & Fdy. Co.
Montclair.—Kent, W., 49 Union St.
Morristown,—Lidgerwood, J. H., Jr.
Newark.—Atha, B., Crucible Steel Co.
Colton, C. A., 367 High St.
Dieffenbach, E. E., 45 Hedden Terrace.
Flinn, F. B., Box 91.
Garlichs, H., Everett Court.
Geppert, R. M., 6 Treacy Ave.
Harrington, H. G., 39 Pacific St.
James, C. S., 35 Runyon St.
Pier, H. M., 98 Hillside Ave.
Randolph, E., 79 Passaic Ave.
Seyfried, R. von, 79 Hillside Ave.
Sherrerd, A. H., 754 Parker St.
Witherell, C. S., Balbach S. & R. Co.
New Brunswick.—Lewis, J. V., Rutgers College.
Painter, R. K., Care Mrs. A. V. Schenck.
Orange.—Edison, T. A.
Malcomson, A. B., Jr.

Oxford.—Brown, L. H., Empire S. & I. Co.
Menefee, A. B., Empire S. & I. Co.
Peattie, C. G., Empire S. & I. Co.
Palisade.—Of, C.
Passaic.—Uehling, E. A., 199 Franklin Ave.
Perth Amboy.—Emanuel, L. V., 165 Rector St.
Keller, E., Box 363.
McComas, K. W., Box 174.
Plainfield.—Hibbard, H. D.
Krom, S. A., 609 Madison Ave.
Princeton.— McCay, LeR. W., Princeton Univ.
Smyth, C. H., Jr., Princeton Univ.
Rahway.—Adams, T. J.
Haasis, D. F., 78 Seminary Ave.
Ridgefield Park.—Eberhardt, W. G.
Ringwood Manor.—Rice, W. E., Ringwood Mines.
Roebling.—Gummere, W.
Sewaren.—Cowles, A. H.
Somerville.—Hooper, G. H., 134 West End Ave.
South Orange.—Self, E. D., 147 So. Orange Ave.
Summit.—Hoggatt, W. B., 110 Beechwood Rd.
Trenton.—Boynton, H. C., J. A. Roebling's Sons Co.
Roebling, C. G.
Roebling, F. W., Jr., J. A. Roebling's Sons Co.
Smith, J. W., Trenton Iron Co.
Smock, J. C.
Watchung.—Moldenke, R.
West Orange.—Sargent, W. D., Hutton Park.
Wharton.—Kelly, E., Wharton Furnaces and Mines.
Peckitt, M., R. F. D.

NEW MEXICO.

Albuquerque.—Brooks, H. O.
Jenks, W., Box 173.
Jones, F. A., Armija Bldg.
Alma.—Weatherby, W. J.
Baldy.—Sparks, J. T.
Chloride.—Kelley, W. A., U. S. Treasury Min. Co.
Whitman, P. R., U. S. Treasury Min. Co.
Dawson.—Mitke, C. A., Box 1226.
O'Brien, T. H., Stag Cañon Fuel Co.
Gibson.—Thomas, E., Weaver Mine.
Hurley.—MacDonald, W. T., Chino Cop. Co.
Mansfield, M., Chino Copper Co.
Phillips, W. I.
Trotter, F. F., Chino Copper Co.
Kelly.—Brown, J., Ozark Smelting & Min. Co.
Magdalena.—Brown, C. H., Mach., Auto & Const. Co.
Mogollon.—Adams, A. K.
Britt, R. H.
Harris, W. F., Socorro Mines.
Orogrande.—Murray, J. J., Orogrande Smelting Co.
Welsh, N. J. E., Jarilla Cop. Synd., Inc.
Santa Fe.—Worth, J. G., Box 295.
Santa Rita.—Moses, H.
Sully, J. M.
Silver City.—Bible, J. W.
Sheridan, J. E.
Socorro.—Anderson, A. J., Socorro Mines.
Brown, C. T.
Tyrone.—Wade, W. R.

NEW YORK.

Albany.—Colvin, V., Box 1, The Capitol.
Newland, D. H., Geological Hall.
Touceda, E.
Angelica.—Lincoln, F. B., Pittsburg, Shawmut & Northern R. R. Co.
Bedford Hills.—Howe, H. M., Broad Brook Road.
Brewster.—Earle, T.
Sayre, M. F., Croton Magnetic Iron Mines.
Brooklyn.—Arnold, L. F., 719A Quincy St.
Blow, J. J., 172 Rodney St.
Crawford, H. E., 450 81st St.
Daniel, J. M., Jr., 459 Washington Ave.
Eilers, A., 751 St. Mark's Ave.
Emlaw, H. S., 1140 Bergen St.
Fackenthal, M., 930 St. Mark's Ave.
Ihlseng, M. C., 953 E. 18th St.
York, J. E., 113 Montague St.
Buffalo.—Brown, H. J., 31 Main St.
Griffin, P. H., N. Y. Car Wheel Wks.
Hildreth, T. F., Davidson Ore Min. Co.
Kennedy, H., 57 Erie County Bank Bldg.
Lee, A. H., Lackawanna Steel Co.
Parrock, H. P., Lumen Bearing Co.
Patch, M. B., 1 Austin St.
Roberts, E. C., 304 Ellicott Sq.
Roberts, J. T., Jr., 350 Main St.
Schneider, A. F., 132 Hodge Ave.
Cairo.—Pfordte, O. F.
Cazenovia.—Burden, H., 2d, Cazenovia National Bank.
Burden, H. H., Care H. Burden, 2d.
De Kalb Junction.— Pattberg, O. F., St. Lawrence Pyrites Co.
Edwards.—Tonkin, J.
Ellenville.—Dutton, W. F., 8 Maple Ave.
Geneva.—Foote, W. B., 24 Sherrill St.
Gloversville.—Kasson, B. Z., 64 S. Main St.
Hoosick Falls.—Beckett, J. A.
Hudson.—Straw, C. A., 218 Warren St.
Ithaca.—Carpenter, R. C., Cornell Univ.
Ries, H., Cornell Univ.
Jamaica.—Apgar, F. W.
La Salle.—Walker, M. R., Box 278.
Mineville.—Le Fevre, S., Witherbee, Sherman & Co.
Stoltz, G. C., Witherbee, Sherman & Co.
Mount Vernon.—Mayer, P. H., 169 N. Fulton Ave.
New Brighton.—Stanley, R. C., 9 Phelps Pl.
New Rochelle.—French, L. H.
Pope, F. J., 60 Centre Ave.
Tower, G. W., Jr., 3 Lincoln St.
New York City.—Abbé, M. F., 220 Broadway
Adams, M. T., 45 Broadway.
Agnew, G. B., 22 William St.
Aldridge, W. H., 14 Wall St.
Allen, J. H., 82 Beaver St.
Allen, W. W., 42 Broadway.
Amy, E. J. H., 44 Wall St.
Armstead, H. H., 29 Broadway.
Atwater, C. G., 17 Battery Pl.
Atwater, R. M., Jr., 25 Broad St.
Austin, A. M., 55 Liberty St.
Bagge, N. O., 19 Cedar St.
Bailey, J. T., 32 W. 40th St.
Baker, C. O., 30 Church St.
Ball, S. H., 71 Broadway.
Banks, J. H., 80 Maiden Lane.
Barbour, T. J., 111 Broadway.
Barnett, M., 11 Pine St.
Bates, M., 27 William St.
Bateson, C. E. W., 43 E. 58th St.
Baumann, A. P., 228 E. 52d St.
Beard, J. T., 505 Pearl St.
Beatty, A. C., 71 Broadway.
Beck, E. A., 90 West St.
Behr, H. C., 71 Broadway.
Benedict, W. de L., 19 Cedar St.
Bennett, A. F., 2 Rector St.
Berkey, C. P., Columbia Univ.
Berry, E. S., 165 Broadway.
Best, William N., 11 Broadway.
Birch, S., 165 Broadway.
Blackwell, F. O., 49 Wall St.
Bliss, C. P., New York Univ.
Bohn, C. A., 165 Broadway.
Bolles, J. H., 114 W. 79th St.
Booraem, R. E., Union Club.
Borie, A. E., 100 Broadway.
Boschen, W. C., 1 W. 89th St.
Bostwick, W. A., 43 Exchange Pl.
Bowler, R. P., 2 Rector St.
Braden, W., 27 William St.

New York City.—Continued.
Bradley, R. J. H., 170 Broadway.
Brodie, W. M., 45 Broadway.
Brown, E. W., 29 Boadway.
Brown, L. B., Union Club.
Brown, T. E., 17 Battery Pl.
Bull, I. C., 100 Maiden Lane.
Burger, C. C., 71 Broadway.
Burns, E. Z., 60 Wall St.
Burrall, F. P., 509 W. 121st St.
Bush, E. R., 69 Wall St.
Cabot, J., Jr., 1 Broadway.
Campbell, W., Columbia Univ.
Carnegie, A., 2 E. 91st St.
Carson, A. C., 42 Broadway.
Chadbourne, H. W., 14 Wall St.
Chandler, C. F., Columbia Univ.
Channing, J. P., 42 Broadway.
Channing, R. H., Jr., 42 Broadway.
Chappell, H. F., 55 Wall St.
Church, J. A., 15 William St.
Clark, C. D., 165 Broadway.
Clark, F. H., 30 Broad St.
Clark, J. H., 80 Broadway.
Clark, W. A., 20 Exchange Pl.
Clarke, E. A. S., 2 Rector St.
Clement, F. H., 124 W. 48th St.
Clements, J. M., 20 Broad St.
Colcord, F. F., 42 Broadway.
Collins, F. W., 50 Church St.
Colvocoresses, G. M., 43 Exchange Pl.
Conley, O. J., 52 Broadway.
Cook, R. A., 229 Broadway.
Cooke, F. W. Jr., 50 Church St.
Cornell, R. T., 45 Cedar St.
Corning, C. R., 36 Wall St.
Corning, F. G., 35 Wall St.
Cox, W. R., 165 Broadway.
Crooke, R. L., 101 Beekman St.
Dana, R. T., 15 William St.
Davis, B., 22 William St.
Davis, C. H., 18 Old Slip.
Davis, H. P., 25 Broad St.
Davis, L. K., 507 Fifth Ave.
Davis, T. B., 1 Broadway.
Delano, W., 1 Broadway.
Demarest, W. G., 559 W. 156th St.
Devereux, J. H., 60 Broadway.
Devereux, W. B., 60 Broadway.
Devereux, W. B., Jr., 60 Broadway.
Dickerman, W. C., 165 Broadway.
Dodge, C. H., 99 John St.
Dominian, L., Am. Geographical Society.
Donald, W., 47 Fulton St.
Donnelly, T. F., 412 W. 149th St.
Douglas, J., 99 John St.
Douglas, T., 80 Maiden Lane.
Dows, D., 50 Church St.
Drew, C. V., 15 Broad St.
Dudley, P. H., Grand Central Terminal.
Dufourcq, E. L., Produce Exchange.
Dunham, L. A., 42 Broadway.
Dwight, A. S., 25 Broad St.
Dwight, T., 15 Broad St.
Dyott, G. M., 1737 Broadway.
Eagan, C. E., 11 Broadway.
Eilers, K., 435 Riverside Drive.
Elkan, B., 42 Broadway.
Elliott, A. H., 165 Broadway.
Elliott, J. S., 61 E. 86th St.
Ellsworth, L., 18 E. 53d St.
Eppley, M., 80 Broadway.
Erdlets, J. F., Jr., 52 Broadway.
Eurich, E. F., 15 William St.
Fairbank, W., 23 Washington Sq.
Falding, F. J., 55 Broadway.
Farish, J. B., 25 Broad St.
Fearn, P. L., 17 Battery Pl.
Ferguson, W., 15 William St.
Feustman, L. P., 115 Broadway.
Finlay, J. R., 52 William St.
Fleming, H. S., 1 Broadway.
Fohr, F., 132 Nassau St.
Forbes, P. R., 15 William St.
Foster, P. L., 111 Broadway.
Francis, L. W., 2 Rector St.

New York City.—Continued.
Francklyn, C. G., 519 Courtlandt Ave.
Frasch, H., 17 Battery Pl.
Gamm, H. F. E., 60 Liberty St.
Garrey, G. H., 165 Broadway.
Gary, E. H., 71 Broadway.
Gayley, J., 71 Broadway.
Gifford, S. D., 74 Broadway.
Gillespie, T. A., 50 Church St.
Gillet, L. M., 69 Wall St.
Glover, G. H., Jr., 701 Madison Ave.
Godley, G. McM., 79 Wall St.
Goodrich, H. B., 450 W. 147th St.
Gouyard, G. M., 260 Convent Ave.
Graef, H. C., 29 Broadway,
Gray, J. H., 71 Broadway.
Greit, A. J., 27 William St.
Griffith, C. G., 15 William St.
Guiterman, F., 165 Broadway.
Hague, W., 22 William St.
Hall, Edward J., 15 Dey St.
Hall, Everett J., Columbia Univ.
Hall, J. H., 165 Broadway.
Hamilton, F. W., 96 Liberty St.
Hamilton, J. W. H., 50 Church St.
Hammond, J. H., 71 Broadway.
Hansell, N. V., 50 Church St.
Hardenbergh, W. P., 47 W. 34th St.
Hardinge, H. W., 50 Church St.
Haskell, J. A., 140 Cedar St.
Heckscher, A., 576 Fifth Ave.
Heller, M. J., 43 Exchange Pl.
Henderson, H. P., 60 Broadway.
Heroult, P. L. T., The Ansonia.
Herreshoff, J. B. F., 620 West End Ave.
Herrmann, C. E., 17 Battery Pl.
Hewitt, E., 50 Church St.
Hewitt, E. R., 17 Burling Slip.
Hochchild, B., 52 Broadway.
Hoffstot, F. N., 24 Broad St.
Holbrook, L., Box 536.
Holderer, G. B., 165 Broadway.
Holter, E. O., 60 Broadway.
Hovey, E. O., Am. Museum of Nat. History.
Howells, G. A., 11 Broadway.
Hulick, W. H., 111 Broadway.
Humphrey, G. S., 45 Broadway.
Humphreys, A. C., 165 Broadway.
Hunt, F. F., 77 Pine St.
Huntoon, L. D., 165 Broadway.
Hutchins, R. G., Jr., 31 Nassau St.
Ihlseng, A. O., 541 W. 124th St.
Ingalls, W. R., 505 Pearl St.
Iredell, F. W., 11 Broadway.
Jacobus, D. S., 85 Liberty St.
James, A. C., 99 John St.
Janeway, J. H., Jr., 55 Wall St.
Jennings, R. E., 100 Broadway.
Jennings, S. J., 44 E. 80th St.
Johnston, A. W., 111 Broadway.
Josephs, I. S., 255 W. 108th St.
Jouet, C. H., Columbia Univ.
Judd, H. E., 2 Rector St.
Judson, J. N., 42 Broadway.
Kahn, J., Sherman Sq. Hotel.
Keller, H. A., 45 Broadway.
Kemp, J. F., Columbia Univ.
Kempton, C. W., 42 Broadway.
Kennedy, J. E., 120 Liberty St.
Kennedy, J. J., 52 Broadway.
Kent, W. St. G., 808 West End Ave.
King, C. F., Bronx Boro. Hall.
Kirchhoff, C., 587 Riverside Drive.
Klepetko, F., 80 Maiden Lane.
Knox, H. H., 82 Beaver St.
Kunz, G. F., 401 Fifth Ave.
Kurtz, E. L., Columbia University.
Lamb, R., 136 Liberty St.
Lancaster, T., 210 Riverside Drive.
Lane, J. S., 50 Church St.
Langeloth, J., 52 Broadway.
Langton, J., 31 Nassau St.
Lawrence, B. B., 60 Wall St.
Leary, D. J., 26 W. 49th St.
Ledoux, A. R., 99 John St.
Le Fevre, H. F., 71 Broadway.

New York City.—Continued.
Leggett, T. H., 165 Broadway.
Lewisohn, J. A., 42 Broadway.
Lidner, P. G., 130 Lexington Ave.
Loeb, C. M., 52 Broadway.
Loomis, E. E., 90 West St.
Lyman, F., 88 Wall St.
McCreery, J. H., 49 Wall St.
McIlvain, E. M., 71 Broadway.
McKenna, C. F., 50 Church St.
McKinlay, W. B., 15 Broad St.
McKinney, R. C., 111 Broadway.
Macdonald, C., 115 Broadway.
MacDonald, M. E., 35 Wall St.
Mannheim, P. A. L., 76 Warren St.
Mayer, L. W., 71 Broadway.
Meeks, R. V., 1 Broadway.
Meier, E. D., 11 Broadway.
Meikleham, T. M. R., 25 Broad St.
Mein, W. W., 43 Exchange Pl.
Mercer, J. W., 15 Broad St.
Merriman, M., 1071 Madison Ave.
Messiter, E. H., 180 13th Ave.
Millard, H. A., 11 Pine St.
Millard, W. J., Columbia Univ.
Miller, J. W., 30 W. 44th St.
Miller, S., 96 Liberty St.
Mills, R. Van A., 20 Union Sq.
Minard, F. H., 111 Broadway.
Monell, A., 43 Exchange Pl.
Moore, G., 330 W. 102d St.
Morrow, J. T., 15 Broad St.
Morse, B. K., 29 Broadway.
Morse, W. S., 165 Broadway.
Moses, A. J., Columbia Univ.
Mosman, P. A., 165 Broadway.
Munroe, H. S., Columbia Univ.
Murray, G., 112 W. 80th St.
Nau, J. B., 1 Broadway.
Neel, C. B., 14 Wall St.
Newhall, H. B., Jr., 90 West St.
Nichols, W. H., Jr., 25 Broad St.
Nicholson, F., 15 E. 10th St.
Nicoll, B., 149 Broadway.
Olcott, E. E., 36 Wall St.
Orr, J. F., 149 Broadway.
Orrok, G. A., N. Y. Edison Co.
Palmer, C. E., 2 Rector St.
Patterson, R. C., Jr., 1 Gramercy Park.
Payne, C. Q., 82 Beaver St.
Peale, R., 70 E. 45th St.
Pearson, F. S., 115 Broadway.
Peele, R., Columbia Univ.
Perin, C. P., 2 Rector St.
Perkins, H. C., 15 Broad St.
Perry, O. B., 165 Broadway.
Perry, W. A., 7 E. 56th St.
Pitkin, L., 47 Fulton St.
Plate, H. R., 14 Wall St.
Poillon, H. A., 25 Broad St.
Pomeroy, W. A., 55 Wall St.
Porter, H. H., 52 William St.
Porter, W. H., 270 Broadway.
Potter, W. C., 28 Nassau St.
Potts, G. E., 200 Fifth Ave.
Powel, DeV., 29 Broadway.
Prentis, E. A., Jr., 408 W. 23rd St.
Preston, V., 60 Broadway.
Prosser, H. A., 165 Broadway.
Pultz, J. L., 131 E. 66th St.
Rand, C. F., 71 Broadway.
Raymond, R. W., 29 W. 39th St.
Reno, J. W., 551 W. 33d St.
Rice, G. S., 154 Nassau St.
Rickard, R. D., 3728 Grand Central Terminal.
Ricketts, P. de P., 80 Maiden Lane.
Riggs, G. W., 27 William St.
Riordan, D. M., 165 Broadway.
Robins, T., Park Row Bldg.
Roe, C. F., 35 E. 37th St.
Roeber, E. F., 239 W. 39th St.
Rogers, A. P., 25 Broad St.
Rogers, E. M., 32 Broadway.
Rogers, W. B., 60 Broadway.
Ropp, A. von der, 71 Broadway.

New York City.—Continued.
Rossi, A. J., 35 Broadway.
Rothschild, C. G., 43 Leonard St.
Rowand, L. G., 55 Wall St.
Ruhl, L., 100 William St.
Runyon, W. C., Hotel Marie Antoinette.
Ryall, G. M., 42 Broadway.
Ryan, J. D., 42 Broadway.
Salas, L. E., 1922 Daly Ave.
Sanborn, J. F., 299 Broadway.
Saulles, C. A. H. de, 165 Broadway.
Saunders, W. L., 11 Broadway.
Schniewind, F. W. C., 6 Church St.
Schroter, G. A., 111 Broadway.
Schwab, C. M., 111 Broadway.
Schwerin, C. M., 1 Broadway.
Scovil, H. H., 30 Church St.
Seaman, H. B., 165 Broadway.
Seligman, A. J., 38 E. 50th St.
Shaw, S. F., 136 Liberty St.
Sherwood, F. P., 34 Pine St.
Shipp, E. M., 2 Rector St.
Shurick, A. T., 505 Pearl St.
Simonds, F. M., 55 Liberty St.
Skinner, E. N., 14 Wall St.
Smith, E. A. C., 165 Broadway.
Smith, E. P., 15 William St.
Smoot, A. M., 99 John St.
Snow, C. H., New York Univ.
Spilsbury, E. G., 45 Broadway.
Stanton, F. McM., 29 Broadway.
Stanton, J. R., 15 William St.
Stanton, R. B., 32 Nassau St.
Stanton, W. A., 811 Trinity Bldg.
Stehli, H. J., 25 Broad St.
Sternfeld, T., 52 Broadway.
Stiles, T. W., University Club.
Stone, G. C., 55 Wall St.
Stoughton, B., 29 W. 39th St.
Struthers, J., 29 W. 39th St.
Sussmann, O., 52 Broadway.
Tainter, F. S., 55 Wall St.
Taylor, W. H., 2725 Whitehall Bldg.
Thayer, B. B., 42 Broadway.
Thomas, K., 20 Broad St.
Thompson, R. M., 43 Exchange Pl.
Thomson, J., 253 Broadway.
Thornton, W. D., 42 Broadway.
Tombo, C., 509 W. 122d St.
Tonnelé, T., 258 W. 70th St.
Torrey, H. G., 10 Wall St.
Towne, R. S., 82 Beaver St.
Townsend, A. R., 25 Broad St.
Traylor, S. W., 30 Church St.
Tyler, N., Jr., 50 Church St.
Vail, R. H., 505 Pearl St.
Value, B. R., 6 Church St.
Van Mater, J. A., 55 Wall St.
Vogel, F. A., 25 Broad St.
Vogelstein, L., 42 Broadway.
Waldo, L., 49 Wall St.
Walker, A. L., Columbia Univ.
Walker, W. R., 71 Broadway.
Waller, E., 159 Front St.
Wang, Y. T., Columbia Univ.
Ward, W. P., 15 Broad St.
Washington, H. S., 149 Broadway.
Watkins, T. H., 17 Battery Pl.
Watson, R. W., 14 Wall St.
Wayne, F. S., 29 Broadway.
Webster, H., 85 Liberty St.
Weddle, J. H., 100 William St.
Weed, W. H., 42 Broadway.
Weekes, F. R., 71 Broadway.
Weir, C. G., 21 E. 82d St.
Westervelt, W. Y., 17 Madison Sq. E.
Westlake, E. H., 11 Broadway.
Wethey, A. H., 40 W. 59th St.
Whinery, S., 95 Liberty St.
Wickware, F. G., 35 W. 32d St.
Wierum, H. F., 11 Broadway.
Wiley, W. H., 43 E. 19th St.
Wiley, W. M., 32 W. 40th St.
Wilkens, H. A. J., 30 Church St.
Williams, D., 437 Eleventh Ave.
Williams, E. G., 43 Exchange Pl.

New York City.—Continued.
Williams, J. T., 27 William St.
Wilson, M. O., 33 Wall St.
Wilson, R. T., Jr., 33 Wall St.
Wood, E. F., 43 Exchange Pl.
Woodman, J. E., N. Y. University.
Wyatt, F., 402 W. 23d St.
Yeatman, P., 165 Broadway.
Young, E. L., 50 Church St.
Zehnder, C. H., 140 Cedar St.
Niagara Falls.—Hall, C. M., Pittsburg Reduction Co.
North River.—Hooper, F. C., North River Garnet Co.
North Tonawanda.—Baker, H. C., King Cons. Co.
Nyack.—Baldwin, W. S., 170 S. Broadway.
Pleasantville Sta.—Barratt, S. A., Box 148.
Sturgis, E. B.
Port Henry.—Witherbee, F. S., Witherbee, Sherman & Co.
Witherbee, W. C., Witherbee, Sherman & Co.
Rochester.—Kneath, W. W., 82 Merriman St.
Scott, D. D., Bausch & Lomb Optical Co.
Rome.—Jenkins, W., Jr., Rome Merchant Iron Mill.
Rye.—Barron, G. D., Box 596.
Schenectady.—Capp, J. A., General Electric Co.
Hunnings, S. V., Am. Locomotive Co.
Pauly, K. A., General Electric Co.
Rushmore, D. B., General Electric Co.
Van Brunt, C. G., General Electric Co.
Whitney, W. R., General Electric Co.
Spuyten Duyvil.—Johnson, E. M., Johnson Steel Wks.
Standish.—Ross, L. P., Northern Iron Co.
Stony Point.—Wiles, E. L.
Syracuse.—Bellinger, H. P., 1902 W. Genesee St.
Blauvelt, W. H., 1917 W. Genesee St.
Cogswell, W. B., Solvay Process Co.
Handy, H. H. S., Semet-Solvay Co.
Hazard, F. R., Solvay Process Co.
Neill, W. L., Solvay Process Co.
Pennock, J. D., Solvay Process Co.
Smith, J. W., 43 White Memorial Bldg.
Trump, E. N., Solvay Process Co.
Witherby, E. C., Semet-Solvay Co.
Talcville.—McLintock, A.
Tuckahoe.—Eldred, B. E., Commercial Research Co.
Westbury Sta.—Sharpless, F. F.
West New Brighton.—Humphrey, C., C. W. Hunt Co.
Miller, D. I., Care C. W. Hunt Co.
Yonkers.—Butler, R. H. B., 60 Fernbrook St.
Thayer, R. H., 12 Windsor Terrace.

NORTH CAROLINA.

Asheville.—Case, B. H., 5 Edgehill Ave.
Hewitt, F. R., 311 Montford Ave.
Candor.—Barbour, P. E., Uwarra Mining Co.
Morrison, H. A.
Chapel Hill.—Pratt, J. H.
Charlotte.—Thies, A., R. F. D. 1, Box 20.
Gold Hill.—Tucker, A.W., Gold Hill Cons. Co.
Oxford.—Caldwell, H. W.
Salisbury.—Mauney, A. C., 610 S. Main St.
Stackhouse.—Betts, A. G., Laurel River Logging Co.

OHIO.

Akron.—Pitkin, S. H., 682 W. Market St.
Athens.—Brown, L. V., Canaan Coal Co.
Cincinnati.—Burke, M. D., 2d Natl. Bank Bldg.
Doane, W. H., Fourth National Bank Bldg.
Meacham, D. B., Carew Bldg.
Waite, H. M., City Hall.
Cleveland.—Abbott, R. R., Peerless Motor Car Co.
Barren, H. A., 181 E. 93d St.
Bartol, G., Otis Steel Co., Ltd.
Cleveland.—Continued.
Brooks, J. Y., Fanner Mfg. Co.
Brown, H. H., 2727 Euclid Ave.
Crafts, W. N., 56 E. Prospect St.
Cremer, J. H., 24 Superior St.
Crowell, B., 407 Perry-Payne Bldg.
Croxton, D. T., 1314 Rockefeller Bldg.
Croxton, S. W., 1314 Rockefeller Bldg.
Dalton, H. G., Western Reserve Bldg.
Dunham, L. E., M. A. Hanna & Co.
Emmerton, F. A., 9 Bratenahl Bldg.
Fulton, C. H., Case School of Applied Science.
Grasselli, C. A., The Arcade.
Hale, H. C., 1038 Schofield Bldg.
Holden, L. E., Cleveland Plain Dealer.
Jeffries, Z., Case School of Applied Science.
Jopling, R. F., 303 Penn Bldg.
Kimmel, H. R., 532 E. 112th St.
Knapp, G. F., Rockefeller Bldg.
Koehler, W., E. 4706 Superior Ave., N. E.
Lash, H. W., New England Bldg.
Lihme, I. P., Grasselli Chemical Co.
McClure, A. P., 1830 E. 101st St.
McKee, A. G., 1303 Rockefeller Bldg.
McMurray, M., Perry-Payne Bldg.
Mather, S., Western Reserve Bldg.
Mather, W. G., Mercantile Bank Bldg.
Merrill, E. P., Union Club.
Merry, H. G., 956 Rockefeller Bldg.
Millard, R. P., 803 Citizens Bldg.
Miller, L. B., Wade Bldg.
Mohrman, E. M., 1293 W. 111th St.
Murray, C. B., Perry-Payne Bldg.
Oglebay, E. W., 38 Wade Bldg.
Peck, F. J., 731 Williamson Bldg.
Pierce, T. E., Semet-Solvay Co.
Quarrie, B. D., Newburgh Steel Wks. & Furnaces.
Rattle, W. J., 8628 Euclid Ave.
Read, J. B., Case School of Applied Science.
Richards, F. B., M. A. Hanna & Co.
Roby, L. A., 1906 E. 82d St.
Sheadle, J. H., Rockefeller Bldg.
Smith, A. W., Case School of Applied Science
Textor, O., 603 Superior Ave., N. W.
Treat, F. H., 11448 Euclid Ave.
Van Horn, F. R., Case School of Applied Science.
Wellman, S. T., 8803 Euclid Ave.
Zeising, R., Old Arcade.
Columbus.—Belden, S. B., Jeffrey Mfg. Co.
Frantz, J. H., Box 751.
Howald, F., 78 Park Drive, Bexley.
Linhardt, H. W., Columbus I. & S. Co.
Lovejoy, E., Schultz Bldg.
Ray, F. A., 6 Deshler Bldg.
Simon, T. B., 124 King Ave.
Sweetser, R. H., Columbus Iron & Steel Co.
Wyer, S. S., Harrison Bldg.
Dayton.—Clements, F. O., 8 Yale Ave.
East Cleveland.—Cross, E. O., 77 Stanwood Rd.
Elyria.—Boynton, A. J., 230 3d St.
Lorain.—Vaughen, S. W., 682 14th Ave.
Lowellville.—Bentley, R., Ohio Iron & Steel Co.
Massillon.—Russell, C. M., Massillon Iron & Steel Co.
Middletown.—Carnahan, R. B., Jr., Am. Rolling Mill Co.
Steubenville.—Smyser, A.E., LaBelle I. Wks.
Toledo.—Ammon, M. A., Willys-Overland Co.
Crowther, J. S., Jr., Toledo Furnace Co.
Stubbs, G. W., 1216 Nicholas Bldg.
Warren.—Kirkham, G. D., 262 High St.
Youngstown.—Brannan, H. S., Youngstown S. & T. Co.
Butler, J. G., Jr.
Ford, E. L., Youngstown Steel Co.
McDonald, J. A., Carnegie Steel Co.
McDonald, T., Carnegie Steel Co.
Manning, W. E., Stambaugh Bldg.
Reese, J. N., 516 Yale Ave.
Robinson, C. S., Youngstown S. & T. Co.

OKLAHOMA.

Ada.—Whitaker, W. L., Oklahoma Portland Cement Co.
Bartlesville.—Bell, F. R.
Rissman, O., National Zinc Co.
McAlester.—Tonkin, S. J., Dow Coal Co.
Muskogee.—Bradley, O. U., 725 Flynn-Ames Bldg.
Perry.—Hartman, T. F.
Wilburton.—Brown, J. J., Oklahoma School of Mines.
Dunkin, D. D., Okla. School of Mines & Met.
Ladd, G. E., Okla. School of Min. and Met.

OREGON.

Baker City.—Gleeson, W. G., Box 423.
Melzer, E.
Schumacher, A. J., Blue Mt. Iron Wks.
Blackbutte.—Harris, W.
Carlton.—Dennis, W. B., Carlton & Coast Ry. Co.
Corvallis.—Parks, H. M., State Bureau of Mines.
Swartley, A. M., 8th and Tyler Sts.
Cottage Grove.—Stewart, A. J.
Eugene.—Emmons, C. D., 156 E. 11th St.
Greenhorn.—Smith, F.D., Snow Creek Mine.
Homestead.—Antz, E.
Hood River.—Batchelder, J. F.
Ontario.—Sparks, V. V.
Portland.—Bentley, T. H., 603 Blake McFall Bldg.
Burrage, W. H., 581 E. Couch St.
Cox, W. R., U. S. Custom House.
Elmer, W. W., 614 Wilcox Bldg.
Furbeck, J. P., 462 E. 9th St., N.
Gallagher, J. H., 1505 Yeon Bldg.
Hammond, I. B., 54 First St.
Keady, L.Y., 926 Chamber of Commerce Bldg.
Lawrie, H. N., 622 Worcester Bldg.
Lindsey, J., 516 Chamber of Commerce.
McAllen, J. L., 328 Hassalo St.
Mackay, W., 723 Park Ave.
Morse, E. C., 5303 42d Ave., S. E.
Neilson, W., 302 Henry Bldg.
Watson, F. W., 1215 Wilcox Bldg.
Rye Valley.—Dake, W. M., Rainbow Mill.
Springfield.—Henderson, J. McC.
Sumpter.—Baillie, F. S., Columbia Mine.
Union.—Marr, R. A.
Vale.—Sommercamp, E. W.

PENNSYLVANIA.

Allentown.—Godshall, H. H., Haas Bldg.
Greenall, J., 1503 Hamilton St.
Altoona.—Pease, F. N., Box 503.
Young, C. D., Pennsylvania R. R.
Ardmore.—Knapp, I. N., 116 Ardmore Ave.
Wedge, U.
Athens.—Ahbe, F. R.
Bear Creek.—Lewis, A.
Bellevue.—Acker, L.K., Jr., 565 Highland Pl.
Bird, R. M., 220 Wall St.
Bethlehem.—Cumings, W. L., 409 E. Broad St.
Huang, S. K., Box 66.
Leibfried, J. E., 19 N. Main St.
Morris, H. T., Bethlehem Steel Co.
Schropp, A. S., 107 Market St.
Birdsboro.—Brooke, D. O.
Brooke, R. E., E. & G. Brooke Iron Co.
Klugh, B. G., Box 382.
Bitumen.—Miller, G. L., Kettle Creek Coal Min. Co.
Braddock.—Dinkey, C. E., Edgar Thomson Steel Wks.
Bryn Mawr.—Ely, T. N.
Burnham.—Skinner, O. C., Standard Steel Wks.
Carnegie.—Carpenter, A. H., American Vanadium Co.
Catasauqua.—Fuller, J. W., Jr., Lehigh Car, Wheel & Axle Wks.
Peckitt, L., Empire Steel & Iron Co.
Seaman, H. J., Atlas Portland Cement Co.
Stillman, J. S., Empire Steel & Iron Co.
Thomas, E.
Chambersburg.—Kennedy, J. S.
Chester.—Callaghan, J. T., Jr., 612 W. 7th St.
Coatesville.—Huston, C. L.
Conshohocken.—Logan, J. W., Alan Wood I. & S. Co.
Wood, R. G.
Coral.—Ramsay, W., Wharton C. & C. Co.
Cornwall.—Souder, H., Cornwall Ore Bk. Co.
Corry.—Bretherton, W. L., Waclark Titanite Explosive Co.
De Lancey.—Hewitt, E. E.
Doylestown.—Dunlap, T., Box 298.
Drifton.—Coxe, E. B., Jr.
Dunbar.—Marshall, S.B., Dunbar Furnace Co.
Dunmore.—Bryden, A., Dudley and 5th Sts.
Duquesne.—Diehl, A. N., Carnegie Steel Co.
Unger, J. S.
Easton.—Bayles, J. C., 529 East Ave.
Dunn, W. R.
Elder, G. R., Ingersoll-Rand Co.
Fackenthal, B. F., Jr., Thomas Iron Co.
Fackenthal, J. S.
Firmstone, F.
Green, C. B., 83 N. 4th St.
Hart, E., Lafayette College.
Marquard, W. B., Lafayette College.
Mitchell, H. H., Drake Bldg.
Rice, J., Drake Bldg.
Sherrerd, J. M., 340 Spring Garden St.
Shimer, P. W., Chemical Laboratory.
East Pittsburg.—Mildon, R. B., Westinghouse Machine Co.
Herr, H. T., Westinghouse Machine Co.
Edgeworth.—Davis, C. W., 407 Cedar Lane.
Ellsworth.—Cooper, M. D., Ellsworth Collieries Co.
Emaus.—Ormrod, G., Donaldson Iron Co.
Ormrod, J. D.
Erie.—Peterson, A. M., 810 Peach St.
Everett.—Linville, C. P., Care J. E. Thropp.
Franklin.—Conradson, P. H., Galena Signal Oil Wks.
Germantown.—Morris, R. J., 509 Lincoln Drive.
Graceton.—Lingle, C. M., Graceton Coke Co.
Harrisburg.—Bailey, J. B., Central Iron & Steel Co.
Boyd, J. Y., 222 Market St.
Dull, A. J., 101 S. Front St.
Gerhardt, R. B., 2143 Penn St.
McCormick, H., Jr., Cameron Bldg.
McCormick, V. C., 223 Market St.
McCreath, A. S., 121 Market St.
McCreath, L., 121 Market St
Roderick, J. E., Bureau of Mines.
Hazleton.—Ayres, W. S.
Davies, W. H., Lehigh Valley Coal Co.
Drake, A. W., 687 N. Church St.
Emerich, L. O.
Hoover, W. M., 173 N. Laurel St.
Houck, C. B., W. B. & H. R. R.
Jones, T. D., Mill Creek Coal Co.
Lewis, A. H., 542 N. Laurel St.
Markle, A., Markle Banking and Trust Co.
Pardee, I. P., Hazleton Iron Wks.
Heilwood.—Dowler, H. P., Penn-Mary Coal Co.
Hellertown.—Hulick, C.E., Thomas Iron Co.
Hokendauqua.—Boyd, H., Thomas Iron Co.
Williams, E. H., Thomas Iron Co.
Hollidaysburg.—McLanahan, J. K.
McLanahan, J. K., Jr., American Lime & Stone Co.
Honesdale.—Fuller, J. T., 505 Park St.
Houtzdale.—Markle, J., G. B. Markle & Co.
Jeddo.—Jessup, A. B.

Johnstown.—Crichton, A. B.
Marshall, S. McC., 134 Tioga St.
Moore, M. G., Moorland.
Stackhouse, D. M., Cambria Steel Co.
Thackray, G. E., Cambria Steel Co.
Thompson, F. E., Cambria Steel Co.
Wolle, H. C., Cambria Steel Co.
Kimmelton.—Krebs, G. J., Reading Iron Co.
Kingston.—Davis, H. G., 352 Rutter Ave.
Newbaker, E. J., 53 Butler St.
Lansford.—Crankshaw, H. M., Lehigh Coal and Nav. Co.
Dorrance, C., Jr., Old Company's Club.
Loomis, W. H.
Ludlow, E., Lehigh Coal & Nav. Co.
Whildin, W. G., Lehigh Coal & Nav. Co.
Lattimer Mines.—Barager, G. W., Pardee Bros. & Co., Inc.
Leaman Place.—Eshleman, S. K., Jr., Box 16.
Lebanon.—Coleman, B. D.
Lee, R. H., Penna. Steel Co.
McKechnie, B. E., 847 Maple St.
Weimer, A. A., Weimer Machine Wks. Co.
Weimer, E. A., E. A. Weimer Engrg. Wks.
McKeesport.—Cornelius, W. A., National Tube Co.
Crawford, R. C.
Mauch Chunk.—Lentz, W. O., Lentz & Co.
Midland.—Badlam, S., Pittsburgh Crucible Steel Co.
Millersville.—Stewart, J. B.
Minersville.—Neale, J. B., Buck Run Coal Co.
Randall, D. V., Lytle Coal Co.
Mount Carmel.—Righter, T. M., Midvalley Coal Co.
Munhall.—Eynon, D. L. L., Homestead Steel Wks.
Nanticoke. — Kohlbraker, F. H., Susquehanna Coal Co.
New Boston.—Jones, J. E., Mill Creek Coal Co.
New Castle.—Cunningham, P. H., 306 N. Jefferson St.
Johnson, C. H., C.W. Johnson Limestone Co.
Newtown.—Hutchinson, E. S.
Norristown.—Hartranft, S. S.
Oakmont.—Scaife, W. B., Structural Iron Wks.
Oliver.—Keighley, F. C., Oliver & Snyder Steel Co.
Osceola Mills.—Good, G. McC. H.
Palmerton.—Singmaster, J. A., N. J. Zinc Co.
Sinn, F. P., N. J. Zinc Co. of Pa.
Parkesburg.—Beale, H. A., Jr.
Thomas, G., 3d, Parkesburg Iron Co.
Parryville.—Freeman, S. S., Carbon Iron & Steel Co.
Osborn, A. A., Carbon Iron & Steel Co.
Philadelphia.—Adams, H. C., 224 S. 3d St.
Aertsen, G., Box 1606.
Bache, F., 505 Land Title Bldg.
Baer, G. F., Reading Terminal.
Baker, D., 1011 Chestnut St.
Barringer, D. M., Bullitt Bldg.
Birkinbine, J., Odd Fellows' Temple.
Birkinbine, J. L. W., Parkway Bldg.
Blair, A. A., 406 Locust St.
Bonzano, A., 22 S. 15th St.
Brown, A. P., Univ. of Pennsylvania.
Burnham, W., Morris Bldg.
Chance, H. M., 839 Drexel Bldg.
Clark, C. M., 321 Chestnut St.
Clark, W., United Gas Imp. Co.
Clymer, E. T., 806 N. 63d St.
Conner, E. T., 1126 Real Estate Trust Bldg.
Corbin, J. R., 1729 Master St.
Coxe, E. J. D., 304 S. 24th St.
Crane, T. I., Real Estate Trust Bldg.
Davis, G. C., 39 S. 10th St.
Dilworth, J. B., 506 Walnut St.
Dimmick, F. D., New Land Title Bldg.
D'Invilliers, E. V., 506 Walnut St.
Dixon, A. F., Land Title Bldg.
Dodge, J. M., Link-Belt Engrg. Co.
Du Bois, H. W., 302 Harrison Bldg.
Dwight, E. W., 407 Sansom St.

Philadelphia.—Continued.
Eynon, T. M., 15th and Clearfield Sts.
Fairchild, S. E., Jr., Land Title Bldg.
Felton, E. C., 300 Girard Bldg.
Firmstone, H., 608 Chestnut St.
Fisher, T., 1100 Arcade Bldg.
Flagg, S. G., Jr., 1421 Chestnut St.
Garrison, F. L., Drexel Bldg.
Gatzmer, W. C., Tacony.
Haldeman, H. L., Real Estate Trust Bldg.
Hamilton, S. H., 2050 N. 63d St.
Harrington, M. H., 17th and Callowhill Sts.
Harvey, W. S., 119 S. 4th St.
Hearn, W. W., Real Estate Trust Bldg.
Heckscher, L., 1421 Chestnut St.
Hess, H., 928 Witherspoon Bldg.
Hibbs, J. G., 613 Penna. Bldg.
Hilles, J. T., 1319 Real Estate Trust Bldg.
Hinchman, C. S., 50 S. 4th St.
Ingram, W. A., 408 Lafayette Bldg.
James, W. M., 1231 Locust St.
Keeley, F. J., 421 Chestnut St.
Keith, N. S., Bullitt Bldg.
King, P. S., 402 Arcade Bldg.
Kurie, F. M., 529 Drexel Bldg.
London, C. J., 5525 Walnut St.
Lyman, B. S., 708 Locust St.
McCallum, W. H., 6602 Germantown Ave.
McIlvain, J. G., 58th St. and Woodland Ave.
Maignen, P. A., 52 N. 13th St.
Miles, J. B., 1011 Chestnut St.
Mitchell, R., Land Title Bldg.
Morris, W. H., 1608 Market St.
Neilson, W. C., 1111 Harrison Bldg.
Penrose, R. A. F., Jr., 460 Bullitt Bldg.
Perry, R. S., 3600 Stokley St.
Peters, R., Morris Bldg.
Peters, R., Jr., 1101 Spruce St.
Pilling, W. S., Real Estate Trust Bldg.
Queneau, A. L. J., Wetherill Finished Castings Co.
Reeves, D., Phoenix Iron Co.
Rehfuss, L. A., 1417 S. Broad St.
Rehfuss, W. C., 1417 S. Broad St.
Riley, L. A., 437 Chestnut St.
Roberts, F. C., Real Estate Trust Bldg.
Roberts, P., Jr., 717 Arcade Bldg.
Salom, P. G., 1409 Commonwealth Bldg.
Sanborn, E. H., Arcade Bldg.
Sanders, R. H., 617 Drexel Bldg.
Smith, N. B., 411 Walnut St.
Smith, W. F., 412 United Gas Improv. Co.
Spurr, J. E., Bullitt Bldg.
Stafford, C. E., Union League Club.
Stevens, M., Penna. Bldg.
Stevenson, A. A., Morris Bldg.
Stevenson, M., Jr., 507 Land Title Bldg.
Strobel, V. O., Niles-Bement-Pond Co.
Swank, J. M., 261 S. 4th St.
Taylor, L. H., Jr., Land Title Bldg.
Thomas, T. L., Bullitt Bldg.
Vauclain, S. M., 500 N. Broad St.
Warriner, S. D., 437 Chestnut St.
Webster, P. W., 3103 Grays Ferry Rd.
Webster, W. R., 411 Walnut St.
Wentz, J. S., 1723 Land Title Bldg.
Williams, M., 907 Arcade Bldg.
Wister, J., 672 Bullitt Bldg.
Wolf, O. C., 511 Dunckla Bldg.
Wood, G. R., Arcade Bldg.
Wood, S., 400 Chestnut St.
Wood, W., 400 Chestnut St.
Philipsburg.—Dunkle, G. F.
Phœnixville.—Harden, J. H.
Maccallum, N. E., Phœnix Iron Co.
Pittsburg.—Allderdice, T., 1711 Frick Bldg.
Armstead, D. McP., Farmers' Bk. Bldg.
Bailey, C., Arrott Bldg.
Baggaley, R., 5th Ave. and Woodland Rd.
Beeken, L. L., Jones & Laughlin Steel Co.
Black, R. M., Univ. of Pittsburgh.
Boileau, J. W., 607 Park Bldg.
Braddock, H. F., 40th and Butler Sts.
Brown, J. T., 5448 Stanton Ave.
Burns, W. J., Singer-Nimick Wks.
Clapp, F. G., 331 Fourth Ave.

Pittsburg.—Continued.
Clapp, G. H., 7th and Bedford Aves.
Coffin, W. C., Jones & Laughlin Steel Co.
Collins, J. P., 222 Matilda St.
Crabtree, F., Carnegie Tech. Schools.
Darsie, J., 401 Wood St.
Davis, S. A., Am. Sheet Steel & Tin Plate Co.
Diescher, A. J., 2124 Farmers Bank Bldg.
Donner, W. H., 721 Frick Bldg.
Dougherty, J. W., Oliver Bldg.
Field, H. E., Mackintosh-Hemphill Co.
Frick, H. C., 1924 Frick Bldg.
Goodale, S. L., Univ. of Pittsburg.
Graybill, J. H., Jones & Laughlin Steel Co.
Griswold, C. T., Carnegie Tech. Schools.
Hood, O. P., Bureau of Mines.
Imhoff, W. G., 6805 Penn Ave.
Jones, L. M., U. S. Bureau of Mines.
Jones, W. L., Jones & Laughlin Steel Co.
Kann, M. M., Westinghouse Bldg.
Kann, W. L., 2418 Farmer's Bank Bldg.
Keeney, R. M., 3519 Fifth Ave., Oakland.
Kennedy, J., Bessemer Bldg.
Laughlin, J. B., Jones & Laughlin Steel Co.
Luce, W. A., 2216 Farmers Bank Bldg.
Lyon, D, A., Box 83, Oakland Sta.
McDowell, J. C., 1206 Farmer's Bank Bldg.
McGrew, E., 1863 Clayton Ave., N. S.
McNaugher, D.W.,Monongahela Bank Bldg.
Martin, R. L., Jr., 704 Oliver Bldg.
Meller, H. B., Univ. of Pittsburg.
Messler, E. L., 55 Water St.
Mesta, G., 708 Lewis Block.
Miller, C. L., 828 Frick Bldg.
Morganroth, L. C., 1800 Farmers Bank Bldg.
Morrison, T., Diamond Bank Bldg.
Page, G. S., Crucible Steel Co. of America.
Patterson, P. C., 554 Frick Bldg. Annex.
Phillips, F. C., Univ. of Pittsburg.
Plock, A. F., 3506 Fifth Ave.
Rea, W. H., 710 Lewis Block.
Rice, G. S., U. S. Bureau of Mines.
Rutledge, J. J., U. S. Bureau of Mines.
Sargent, G. W., Oliver Bldg.
Savage, J. A., 622 Frick Bldg.
Scaife, C. C., 221 1st Ave.
Scaife, J. V., 221 1st Ave.
Scaife, O. P., Box 974.
Scaife, W. L., Scaife Foundry & Machine Co.
Scott, J., 5635 Stanton Ave.
Shiras, W. McG., Carnegie Bldg.
Smith, H. I., U. S. Bureau of Mines.
Smith, R. L., H. W. Oliver Bldg.
Snelling, W. O., 1707 Union Bank Bldg.
Speller, F. N., National Tube Co.
Taylor, E. J., 229 N. Craig St.
Taylor, S. A., Lewis Block.
Toy, F. L., 927 Maryland Ave.
Wadsworth, M. E., Univ. of Pittsburg.
Walter, B., 6823 Thomas Blvd.
Westinghouse, G.
Wilkins, W. G., Westinghouse Bldg.
Willard, J. O., Eliza Furnaces.
Wood, T. D., 81 Vandergrift Bldg.
Woodworth, R. B., 427 Carnegie Bldg.
Zoch, F. P., 514 Wood St.

Pittston.—Law, J. B., 115 York Ave.
Owens, W. D., 239 Philadelphia Ave.

Port Carbon.—Allison, R.

Pottstown.—Cook, E. B., 743 King St.
Cook, E. S., Warwick Iron & Steel Co.
Hartshorne, J.
Hobart, S. O., Warwick I. & S. Co.
Potts, G. H., Potts Bros. Iron Co., Ltd.
Roe, J. P., Glasgow Iron Co.

Pottsville.—Althouse, H. W.
Archbald, J., Jr., Thompson Bldg.
Chance, E. M.
Cullum, J. B.
Ginder, W. H. H.
Herndon, E. L., Eastern Steel Co.
Hill, F. A., 512 S. Centre St.
Luther, E. C.
Richards, W. J., Phila. & Read. C. & I. Co.
Sheafer, A. W.
Snyder, B., Jr.

Primos.—Stein, W. M., Primos Chem. Co., Inc.

Punxsutawney.—Cook, J. B., Spirit Bldg.
Furniss, T. A.
McLeavy, J.

Rankin.—Berg, H. A., Carnegie Steel Co.

Reading.—Bower, C. P., 520 Walnut St.
Broden, A., Reading Iron Co.
Kunhardt, W. B., 43 Exeter St.
McIlvain, W. R., Reading Gas Co.
Pendleton, J. S., Carpenter Steel Co.
Quier, E. A., Reading Fire Brick Wks.
Smink, F. C., Reading Iron Co.

Republic.—Nold, F. B., Republic I. & S. Co.
Zeller, H. P., Republic I. & S. Co.

Riddlesburg.—Lauder, W., Colonial Iron Co.

Robesonia.—Kramer, J. F.

Saxton.—Thomas, J. W.

St. Davids.—Lyle, D. A.

Scottdale.—Oberly, A. D., Frick Coke Co.
Stratton, W. C., Kromer House.

Scranton.—Archbald, H., 236 Monroe Ave.
Belin, H., Jr., Traders Natl. Bank Bldg.
Bryden, C. L., 1015 Myrtle St.
Davis, M., Jr., 42 Coal Exchange.
Duck, G. F., Care *Mines and Minerals.*
Engel, G. W., P. O. Box 540.
Foster, R. J., International Text Book Co.
Gleason, F. A., 1911 Capouse Ave.
Griffith, W., Coal Exchange Bldg.
Jones, E. S., Commonwealth Bldg.
Law, A. F.
Lawrence, W. L., 719 Delaware St.
Leaning, E. H., Nav Aug Coal Co.
Mattes, W. F., 514 Board of Trade Bldg.
Parke, W. G., People's Coal Co.
Pettebone, E. R., Delaware & Hudson Co.
Platt, F. E., Board of Trade Bldg.
Platt, F. J., 625 Cornell Bldg.
Richmond, W. H., Richmond Hill.
Scranton, W. W., Scranton Gas & Water Co.
Simpson, C. D., Box 545.
Stevenson, G. E., Connell Bldg.
Storrs, A. H., 704 Connell Bldg.

Sharon.—Brayer, N. G., National Malleable Castings Co.
Buhl, F. H., E. State St.
McClure, S., Stewart Iron Co.
Stevenson, J., Jr.
Thomas, J. F., 15 Logan Ave.

Sharpsville. — Collord, G. L., Shenango Furnace Co.
Pierce, J. B., Sharpsville Furnace Co.

Sheridan.—Chauvenet, S. H., Berkshire Iron Wks.

Snow Shoe.—Snyder, W. C., Lehigh Valley Coal Co.

South Bethlehem.—Acker, E. O'C., Bethlehem Steel Co.
Buck, C. A., Bethlehem Steel Co.
Colby, A. L., 447 Lehigh St.
De Saulles, A. B., 507 Delaware Ave.
Drinker, H. S., Lehigh University.
Eckfeldt, H., Lehigh University.
Grace, E. G., Bethlehem Steel Co.
Johnston, A., Bethlehem Steel Co.
Miller, B. Le R., Lehigh University.
Richards, J. W., Lehigh University.
Shimer, W. R., Bethlehem Steel Co.
Snyder, H. S., Bethlehem Steel Co.
Wilbur, W. A., Valley Coal & Coke Co. of W. Va.
Yang, C., Box 202.

State College.—Crane, W. R., Penna. State College.
Pallister, H. D., Penna. State College.

Steelton.—Carney, F. D., Penna. Steel Co.
Davis, W. W., Semet-Solvay Co.
Little, J. E., Spanish-American Iron Co.
McKay, R. V., Penna. Steel Co.
Reynders, J. V. N., Penna. Steel Co.
Turner, C. P., Penna. Steel Co.

Torrisdale.—Saunders, W. E.

Tyrone.—Bachert, A. E.

Uniontown.—Wright, C.O., Fayette Eng. Co.
Kennedy, O. W., H. C. Frick Coke Co.
Willard, L. L., W. J. Rainey Estate.

Vandergrift.—Beale, A. H.
Villanova.—Saxman, E. F.
West Chester.—Baird, H. J. B.
White Mills.—Dorflinger, C. H.
Wilkes-Barre.—Ashley, H. H., 164 S. River St.
Bridgman, J. C., 118 W. River St.
Bunting, D., Lehigh & Wilkes-Barre Coal Co.
Chase, F. M., Lehigh Valley Coal Co.
Dodge, W. F., Bennett Bldg.
Enzien, C., U. S. Bureau of Mines.
Haldeman, G. T., 214 Coal Exchange.
Huber, C. F., 160 S. River St.
Humphrey, J. M., 458 S. Franklin St.
Lawall, E. H.
McMahon, F. J.
Nicholson, S. T., Vulcan Iron Works.
Norris, R. Van A., 2d Natl. Bank Bldg.
Quin, R. A., 16 W. River St.
Stearns, I. A., 60 S. River St.
Steriing, P., Lehigh Valley Coal Co.
Welles, T. L., Coal Exchange.
Zerbey, F. E., 97 N. River St.
Wilkinsburg.—Harrop, H.S., 431 South Ave.
Kerr, D. G., 1102 Centre St.
Williamsport.—Ahles, R. L., Sweets Steel Co.
Wyebrooke.—Potts, W.M., Isabella Furnace.

PHILIPPINE ISLANDS.

Aroroy.—Wilmot, H. C., Colorado Mining Co.
Cadiz.—Nichols, J. C.
Manila.—Dalburg, F. A., Division of Lands.
Pratt, W. E., Division of Mines.
Negros.—Philippine Lumber Co.

PORTO RICO.

San Juan.—Holmes, F. C., Box 2.

RHODE ISLAND.

Newport.—Emmons, A. B.
Howe, E., 77 Rhode Island Ave.
Richards, E., 60 Ayrault St.
Providence.—Flagg, A. L., 287 Highland Ave.
Pitman, S. M., 721 Banigan Bldg.

SOUTH CAROLINA.

Clinton.—Scaife, H. L., Carmen Mining Co.
Columbia.—Taber, S., Univ. of South Carolina.
Georgetown.—Boyt, J., E. I. du Pont de Nemours Co.
Darlington, W.

SOUTH DAKOTA.

Deadwood.—Vincent, H. S.
Wilson, A. D., Box 156.
Hill City.—Overpeck, A. C., Dakota Calumet Camp.
Lead.—Blackstone, R., Homestake Min. Co.
Clark, A. J., Homestake Min. Co.
Grier, T. J., Homestake Min. Co.
Herz, N., Box 847.
Manion, E., 221 S. Main St.
Ross, A. J. M., Homestake Min. Co.
Schnitzel, H.
Sharwood, W. J., Homestake Min. Co.
Yates, B. C., Homestake Min. Co.
Rapid City.—Ehle, M., Jr., S. D. School of Mines.
Halley, A. S.
O'Harra, C. C., S. D. School of Mines.
Trojan.—Bowman, F. C.

TENNESSEE.

Bristol.—Puckette, S. E., Black Mountain Coal Land Co.
Cardiff.—Tarwater, P., Brown Min. Co.
Careyville.—McManaman, J. H., Careyville Coal Co.
Chattanooga.—Bowron, W. M., Care *The Tradesman.*
Carter, T. E., 321 James Bldg.
Chamberlain, H. S., Roane Iron Co.
Chamberlain, M., Roane Iron Co.
Colyar, L. S., Eagle Iron Co.
James, C. E., Durham Coal & Coke Co.
James, W. T., Durham Coal & Coke Co.
Lasley, T. H.
Lasley, W. H., First Natl. Bank Bldg.
Maynard, T. P., 321 James Bldg.
Smith, C. H., James Bldg.
Torbert, J. B., 406 James Bldg.
Copperhill.—Bone, A. J., Tenn. Copper Co.
Caine, M. A., Tenn. Copper Co.
Case, A. H., Tenn. Copper Co.
Isabella.—Renwick, C. W., Ducktown Sulphur, Cop. & Iron Co.
Knoxville.—Jarvis, R. P., 1700 Cornell Ave.
Myers, R. V., 603 Empire Bldg.
Rodgers, G. B., 1724 Magnolia Ave.
Wait, C. E., Route 15.
La Follette.—Crewe, L. C., La Follette Iron Co.
Howe, F. P.
La Follette, H.M., La Follette Coal I. & R.Co.
Mascot.—Ripley, G. C., Am. Zinc Co.
Memphis.—Reid, J. W., 116 S. Front St.
Watson, W. S., 1215 Miss. Ave.
Mt. Pleasant.—Davison, G. L., Box 256.
Nashville.—Dudley, W. L., Vanderbilt Univ.
Glenn, L. C., Vanderbilt Univ.
Purdue, A. H., State Geol. Survey.
New Market.—Osgood, S. W., Jolley Mine.
Underhill, W. A., Grasselli Chem. Co.
Rockwood.—Clymer, F. H., Roane Iron Co.
Wind Rock.—Hutcheson, W. C.

TEXAS.

Austin.—Phillips, W. B., Univ. of Texas.
Beaumont.—Wilson, N. R., 780 Sabine Pass Ave.
Corpus Christi.—Hackett, W. H.
Hammer, W. L., 603 Mesquite St.
Corsicana.—Lee, M. P., 1025 Summit Ave.
Danbury.—Kedzie, G. E.
El Paso.—Casey, J. P., 1509 Montana St.
De Vore, E. H., 205 Mills Bldg.
Drury, W. M., Mills Bldg.
Earle, F. C., El Paso Smelting Wks.
Gordon, W. D., Mine & Smelter Supply Co.
Hardy, J. G., Box 134.
Hutchinson, R. B., Toltu Club.
Kane, J. I., Coles Bldg.
Koch, W. E., Box 718.
Laird, G. A., 811 Mills Bldg.
Ormsbee, J. J., El Paso Smelting Wks.
Parker, M. B., Box 52.
Phillips, W. I., General Delivery.
Reckhart, D. W., Box 88.
Rice, J. A., 519 Guarantee Trust Bldg.
Rose, W. W., 1428 Montana St.
Small, W. N., El Paso Foundry & Mach. Co.
Torres, F. L., 803 Austin St.
Wright, L. A., 813 Mills Bldg.
Fort Worth.—Shaw, J. S., 836 Monroe St.
Houston.—Dickson, J. F., 1216 Main St.
Dumble, E. T., 2003 Main St.
Hager, L., Hotel Brazos.
Mission.—Brooks, R.
San Antonio.—Goedicke, C., Box 535.
Setz, G., Box 961.
Tuttle, A. L., 420 Martin St.
Wines, J. M., Box 535.
Shafter.—Burcham, W. D.
Gleim, E. M., Presidio Mining Co.

UTAH.

Alta.—Lemmon, D., Columbus Extension Min. Co.

Bingham Canyon.—Rood, V. S., Utah Apex Min. Co.
Sears, S. C., Utah Apex Min. Co.
Thompson, C. D., Bingham-New Haven Min. Co.
Callao.—Watson, R. W. (Clifton Mail Box.)
Clear Creek.—Hill, F. C.
Eureka.—Fitch, W., Chief Cons. Min. Co.
McChrystal, J. H., Box F.
Frisco.—Hendrickson, W. H.
Garfield.—Hansen, F., Box 975.
Hogarty, B., Garfield Smelting Co.
MacDonald, J. J., Utah Copper Co.
Oliver, L., Jr., Utah Copper Co.
Kenilworth.—Chaney, R. G., Jr., Independent C. & C. Co.
Lark.—Cole, W. B., Ohio Copper Co.
Lofgreen.—Nebeker, A. C., Scranton Mines.
Midvale.—Palmer, I. A., U. S. Smelting Co.
Murray.—Kilbourn, W. D., Am. Smelt. & Refg. Co.
Richard, B. N., Am. Smelt. & Refin. Co.
Newhouse.—Heidenreich, W. L., So. Utah Mines & Smelters.
Ogden.—Villadsen, A. B., Care Pingree Natl. Bank.
Ophir.—Clark, E. W., Ophir Hill Cons. Mining Co.
Park City.—Humes, J., Silver-King Coalition Mines Co.
Lewis, H. M., Box 192.
Mason, R. T., Daly-Judge Mining Co.
Sherman, F. W., Daly-West Min. Co.
Williams, F. T., Daly-West Min. Co.
Salt Lake City.—Anderson, F., 468 So. 12th East St.
Austin, L. S., 251 W. 2d North St.
Bardwell, A. F., 158 S. W. Temple St.
Bodfish, F. V., 1011 Newhouse Bldg.
Bradford, R. H., Univ. of Utah.
Browning, W. C., Newhouse Bldg.
Callow, J. M., 159 Pierpont St.
Clement, H. E., University Club.
Colbath, H., Care J. W. McKim, Dooly Block.
Cowans, F., Utah Cons. Mining Co.
Daggett, E., Cumings Apts.
Dick, J. C., Box 1418.
Donohue, P. J., 66 W. 3d South St.
Doolittle, C. H., 508 McCornick Block.
Duffield, M. S., 416 Felt Bldg.
Dunyon, N. W., 721 McIntyre Bldg.
Ellerbeck, T. R., 53 W. 2d South St.
Ellis, H. R., 148 Pierpont St.
Frank, A., 809 Newhouse Bldg.
Gayford, E., 159 Pierpont St.
Gemmell, R. C., Box 1169.
Gilkerson, H. G., 318 Judge Bldg.
Glassbrook, C. I., 143 So. 12th East St.
Gunn, G. E., 205 Newhouse Block.
Hamman, J. S., Box 1236.
Hanchett, L., 983 Third St.
Hansen, G. T., Dooly Bldg.
Heikes, V. C., U. S. Geol. Survey.
Howard, W. H., Am. Smelt. & Refin. Co.
Inglis, J. F., 535 Ninth Ave.
Jackling, D. C., Box 1556.
Jeffs, L. A., 919 Kearns Bldg.
Jennings, E. P., 607 Newhouse Bldg.
Johnson, E. W., Univ. Club.
Johnson, M. M., 521 E. 2d South St.
Jones, E. B., Box 502.
Kirk, M. P., Newhouse Bldg.
Krumb, H., 402 Felt Bldg.
Lavagnino, G., Box 550.
Leavell, J. H., Newhouse Bldg.
Lewis, R. S., Univ. of Utah.
Lundberg, J., 79 P St.
McCaskell, J. A., 503 Felt Bldg.
McChrystal, J. C., 723 Kearns Bldg.
McKim, J. W., 532 Dooly Block.
Miller, A. J., 315 So. 10th East St.
Mixer, C. T., Box 56.
Nebeker, W. G., 35 E. 1st North St.
Newhouse, S., Box 930.
Riter, G. W., Eureka Hill Min. Co.

Salt Lake City.—Continued.
Riter, L. E., Jr., 608 Utah Sav. & Trust Bldg.
Tibby, B. F., 419 Newhouse Bldg.
Tiernan, A. K., University Club.
Van Winkle, C. T., Scott Bldg.
Wall, E. A., 320 D. F. Walker Bldg.
Weir, T., 309 Dooly Block.
Whitley, C. W., 714 McCornick Bldg.
Wilson, G. B., Am. Smelt. & Refin. Co.
Wilson, W. A., Box 7.
Winwood, J. H., Continental Block.
Wraith, W., Kearns Bldg.
Zalinski, E. R., 819 Newhouse Bldg.
Tooele.—Barnes, W. A., Utah Metal Min. Co.
Day, O. M., International S. & R. Co.
Hodges, A. B. W., P. O. Box 140.
Kinney, H. D., Utah Metal Min. Co.
Thomson, H. N., International S. & R. Co.

VERMONT.

Randolph.—Hollis, C. B., Box 489.
Woodstock.—Williams, E. H., Jr., "Westerdale."

VIRGINIA.

Big Stone Gap.—Hodge, J. M.
Peck, W. R.
Blacksburg.—Burkhart, O. C., Va. Polytechnic Inst.
Holden, R. J.
Buchanan.—Pechin, E. C.
Charlottesville.—Watson, T. L., Univ. of Va.
Covington.—Parrish, R. L., Oriskany Ore & Iron Co.
Darbyville.—Thompson, C. H.
Glamorgan.—Cheyney, J. S., Stonegap Colliery Co.
Glen Wilton.—Doak, S. E., Princess Furn. Co.
Hudson, J. B., Princess Furn. Co.
Inman.—Whitehead, H. F., Virginia Iron, Coal & Coke Co.
Lantana.—Knutzen, T., Young America G. M. Co.
Leesburg.—Grammer, F. L.
Grammer, W. S.
Janney, T. G.
Lignite.—Stull, J. W.
Low Moor.—Humbert, F. U.
Lipscomb, R. A.
Means, E. C., Low Moor I. Co.
Weld, C. M.
Lynchburg.—Taylor, W. W., Oriskany Ore & Iron Co.
Norfolk.—Wadleigh, F. R., 1013 Bank of Commerce Bldg.
Pennington Gap.—Shoemaker, G. M., Virginia Lee Co., Inc.
Pocahontas.—Stow, A. H.
Wright, H. B., Pocahontas Cons. Collieries Co.
Pulaski.—Hill, R. F., Pulaski Min. Co.
Richmond.—Froehling, H., 911 Floyd Ave.
Gay, W. B., Mayo Land & Bridge Co.
Jones, C. Ap. C., 908 W. Franklin St.
Moore, W.
Scarborough, F. W., 723 E. Main St.
Roanoke.—Coe, W. W., Pocahontas Coal & Coke Co.
Wallis, P., Hotel Roanoke.
Staunton.—Catlett, C.
Porter, J. J., Box 664.
Tazewell.—Williams, J. P.
University.—Grasty, J. S.
Virgilina.—Lassiter, R. G.
Ware Neck.—Blow, A. A.
Warrenton.—Fell, E. N., "Creedmore."
West Norfolk.—Hamilton, E. H., Virginia Smelting Co.
Wytheville.—Hicks, C. M.

WASHINGTON.

Bellingham.—Laube, F. E., 1710 Eldridge Ave.
Phoenix, C. E., White House Hotel.
Chewelah.—Greensfelder, N. S., United Copper Mining Co.

Everett.—Butler, W. C., 1st Natl. Bank.
Fairfax.—Butler, M. C., Tacoma Smelting Co.
Loomis.—Limbach, E. C., Tillicum Development Co.
Northport.—Tower, L. L.
Pullman.—Shedd, S., Wash. Agri. College.
Thomson, F. A., 302 Oak St.
Republic.—Jones, Z., Box 371.
Marsh, R., Box 402.
Newton, H. W.
Richardson, S. H., Jr., Box 297.
Sharp, B. N., Box 202.
Roslyn.—Menzies, J. F., N. W. Improvement Co.
Morgan, G. C.
Seattle.—Blair, A. F., Lowman Bldg.
Clark, V. V., 444 Henry Bldg.
Dahl, O. R., 528 New York Block.
Daniels, J., Univ. of Washington.
Dunn, R. I., 3336 37th Ave. So.
Evans, G. W., 423 New York Block.
Fogh, H. P., 1403 Howell St.
Hill, F. A., 411 Mutual Life Bldg.
Jayne, A. R., 319 New York Block.
Kleesattel, R., Vanstone Hotel.
Landes, H., Univ. of Washington.
Laucks, I. F., 95 Yesler Way.
Lee, C. F., 444 Henry Bldg.
Lewis, C. M., 317 Pacific Block.
Manley, H. L., 1152 Eastlake Ave.
McLeod, H. D., Seattle Const. & Dry Dock Co.
Otterson, G. W., 1421 E. 45th St.
Powell, F., Seattle Const. & Dry Dock Co.
Robbins, H. R., Box 51.
Roberts, M., Univ. of Washington.
Rodgers, J. H., 2387 Eleventh Ave. N.
Rodgers, M. K., 2338 Tenth Ave. N.
Slater, A., 1043 Henry Bldg.
Stephen, W. M., 826 New York Block.
Thomas, B., Box 1361.
Watters, D. M., 2557 Eleventh Ave.
Wolfiin, H. M., U. S. Bureau of Mines.
Spokane.—Armstrong, L. K., P. O. Drawer 2154.
Boyd, A. W., 519 Madison Ave.
Breen, J., Spokane Hotel.
Burbridge, F., Paulson Bldg.
Clarke, R. H., Old National Bank Bldg.
Fassett, C. M., 207 Wall St.
Goodsell, C. H., 818 Paulsen Bldg.
Haas, J. C., 1009 Paulson Bldg.
Holmes, J. A., Care United Iron Works.
Hoover, C. L., 625 Peyton Block.
Kehoe, H., South 1123 Wall St.
Lancaster, H. M., 715 Hutton Bldg.
Linney, W. H., 2805 W. Mission St.
Porter, J. McD., A. D. Jones Bldg.
Ralston, J. C., 2421 W. Mission Ave.
Rice, J. F., S. A. A. Club.
Richards, J. V., 1028 Old Nat. Bank Bldg.
Riebel, O. F., Box 1890.
Robbins, C. P., Box 1910.
Roberts, E. J., Box 2147.
Ross, F. A., Spokane Club.
Sonnemann, G. A., The Rookery.
Spalding, E. P., 1017 Paulson Bldg.
Tate, E. L., Box 384.
Tacoma.—Claghorn, C. R., Headquarters Bldg.
Hebb, P. H.
Levensaler, L. A., Tacoma Smelting Co.
Morse, W. V., Tacoma Smelting Co.
Pott, J. N., N. W. Improvement Co.
Shera, E. L., 421 N. 6th St.

WEST VIRGINIA.

Ansted.—Page, W. N., Gauley Mt. Coal Co.
Benwood.—Wood, W. O., Semet-Solvay Co.
Berkeley Springs.—Randolph, B. S.
Bluefield.—Clagett, T. H., Pocahontas C. & C. Co.
Bramwell.—Buck, S. M.
Carbon.—James, W. E.
Charleston.—Borden, G. S., New River & Pocahontas Cons. Coal Co.
Clark, J. M., 813 Kanawha St.
Cunningham, J. S., Nat. City Bank Bldg.
Johnson, H. S., Charleston Elec. Supply Co.
King, A. J., Box 826.
Krebs, C. E., 2307 Washington St.
Quarrier, K. D., 508 Kanawha St.
Eagle.—Atkinson, L. W., St. Clair Colliery Co.
Eckman.—Cunnyngham, F. E., Pulaski I. Co.
Schofield, W. McN.
Elkhorn.—Lincoln, J. J., Upland C. & C. Co.
Tierney, J. J., Pocahontas Co.
Fairmont.—Haas, F., Fairmont Coal Co.
Moore, E. B., Consolidation Coal Co.
Rightmire, R. E., Consolidation Coal Co.
Fire Creek.—Blackburn, H. H., Fire Creek C. & C. Co.
Gary.—Eavenson, H. N., U. S. C. & C. Co.
O'Toole, E., U. S. Coal & Coke Co.
Glen Jean.—Nichol, T., McKell C. & C. Co.
Glen White.—White, E. E., E. E. White Coal Co.
Jenkinjones.—Ewing, H. E., Box 71.
Jodie.—Marshall, J. J., Gauley Mt. Coal Co.
Page, E. R.
Kanawha Falls.—Roeser, E. B.
Landgraff.—Ord, W. D., Empire C. & C. Co.
Lost Creek.—Leisenring, A. C.
Macdonald.—Dixon, S.
Thomas, P. C.
Meadow Creek.—Raine, J. M., Sewell Valley R. R. Co.
Morgantown.—Greer, H. C., Box 449.
Powellton.—Evans, D. T., Mt. Carbon Co., Ltd.
Powhatan.—Tierney, L. E., Powhatan, Lynchburg, Elk Ridge & Eureka C. & C. Co.
Red Jacket.—Cummins, W. N., Red Jacket Cons. Coal & Coke Co.
Rose Siding.—McNulty, S. G., Thacker Coal Mining Co.
Slab Fork.—Caperton, W. G.
Stanaford.—Binford, C. M., Piney Min. Co.
Stone Branch.—Kent, J. F., Stone Branch Coal Co.
Vivian.—Patterson, G. S.
Ward.—Gressang, C. C., Kelly's Creek Colliery Co.
Wheeling.—Hearne, D. G.
Hearne, J. G., 15th and McColloch Sts.
Stalnaker, R., B. & O. R. R. Co.
Underwood, L. H., National Tube Co.
Williamson.—Anderson, J. K., Care Anderson & Schofield.
Mannakee, N. H.
Winding Gulf.—Elgin, W. J., Winding Gulf Colliery Co.
Worth.—Brooke, H., Roanoke C. & C. Co.

WISCONSIN.

Appleton.—Bagg, R. M., Jr., Lawrence College.
Orbison, T. W.
Ashland.—Johnson, J. E., Jr., Lake Superior Iron & Chemical Co.
Eau Claire.—Skeels, L. H., 1239 S. Farwell St.
Florence.—Dickinson, E. S.
Wheelwright, O. W.
Hazel Green.—Strasser, W. F.
Hurley.—Hardenburgh, L. M., Odanah I. Co.
Royce, S., Pickands, Mather & Co.
Madison.—Havard, F. T., Univ. of Wisconsin.
Holden, E. C., Univ. of Wisconsin.
Leith, C. K., Univ. of Wisconsin.
Van Hise, C. R., Univ. of Wisconsin.
Winchell, A. N., Univ. of Wisconsin.
Mayville.—O'Connor, E. S., Northwestern Iron Co.
Milwaukee.—Hulst, N. P., 300 Knapp St.
Schlesinger, F., Lock Box 418.
Woodbury, F. E., Colby-Abbot Bldg.
Platteville.—George, H. C., Wisconsin Zinc Co.
Racine.—Wilson, G. B., Racine Rubber Co.

WYOMING.

Cheyenne.—Bartlett, A. B., 220 W. 19th St.
Jamison, C. E.
Thermopolis.—Freeman, G. N
Wiley.—Harrison, T. S.

CANADA.

ALBERTA.

Bankhead.—Guernsey, F. W., C. P. Ry. Co.
Calgary.—McNeill, W. F., 301 Judge Travis Bldg.
Stockett, L., Can. Pac. Rwy.
Coleman.—Powell, J. W., Box 106.
Lethbridge.—Livingstone, R.
Medicine Hat.—Evered, N. J., Care J. D. Evered.
Pocahontas.—Morris, R. H.
Morse, G. H.
Strathmore.—Stockton, R. S., C. P. Ry.

BRITISH COLUMBIA.

Ainsworth.—Nellis, D. H., Box 21.
Barkerville.—Bailey, M.
Chemainus.—Banon, H. C., Box 144.
Cranbrook.—Laidlaw, J. T.
Pollen, C. H.
Duncan.—Wood, T. A.
Ferguson.—Merry, F. C.
Gateway.—Smith, A. H.
Golden.—Brady, J.
Grand Forks.—Bishop, W. P.
Greenwood.—Bell, W. L., B. C. Copper Co.
Brunton, F. K., B. C. Copper Co.
Keffer, F., B. C. Copper Co., Ltd.
Hosmer.—Thorne, B. L.
Kamloops.—Argall, J., Iron Mast Mine.
Batchelor, O. S., Box 221.
Kaslo.—Zwicky, W. E., Rambler-Cariboo Mine, Ltd.
Ladysmith.—Watson, W. J., Tyee Copper Co.
Nelson.—Gracey, A. H.
Revell, G. E., Box 132.
New Westminster.—Spicer, P. O., Box 544.
North Vancouver.—Goldsworthy, J., Box 2079.
Paulson.—Pearce, F. E., Inland Mining Co.
Princeton.—Holden, J. O. E., Princeton C. & L. Co., Ltd.
Penticton.—Stevens, B.
Riondel.—Fowler, S. S., New Canadian Metal Co., Ltd.
Rossland.—Claudet, H. H.
Loux, C. H.
Sheep Creek.—Farish, G. E., Motherlode Sheep Creep Min. Co.
Rodgers, C. E., Motherlode Mill.
Silverton.—Hanckel, C., Silverton Mines, Ltd.
Trail.—Stewart, R. H.
Vancouver.—Carry, H. E. C., 1306 Cardero St.
Cleveland, E. A., Rogers Bldg.
Emmens, N. W., 505 Metropolitan Bldg.
Haggen, E. A., 1105 Dominion Trust Bldg.
Hedley, R. R., 300 Pender St., W.
Hepburn, A. E., 1146 Broughton St.
Kiddie, T., 884 Bute St.
Kirkpatrick, G. H., Box 1555.
Knight, E. C., Box 308.
Larson, A. G., 809 Bower Bldg.
Laselle, B. A., Cotton Bldg.
Leckie, J. E., Box 1555.
Leckie, R. G. E., Box 1555.
Norrie, W. G., 809 Bower Bldg.
Parker, J. L., 523 Pacific Bldg.
Prentice, R., Box 1595.
Sharp, A., 2526 W. 7th Ave.
Thomson, R. W., 1261 Granville St.
Townsend, N. F., 66 Fairfield Bldg.
Verrill, C. S., 712 Pacific Bldg.
Verschoyle, C. W. D., 617 Pacific Bldg.
Warden, B. R., Vancouver Block.
Wolff, M. A., 618 Pacific Bldg.
Victoria.—Brewer, W. M., Box 701.
Brindle, A. St. C., 123 Pemberton Bldg.
Forbes, D. G., Union Club.
Gard, I. B., Canadian Collieries, Ltd.
Grant, G. H., Care W. Grant, Point Ellice.
Musgrave, R., 1206 Government St.
Robertson, W. F., Dept. of Mines.
Sutton, W. J., 749 Discovery St.
Ymir.—De Lashmutt, I., Hobson Silver Lead Co.

NEW BRUNSWICK.

Turtle Creek Siding.—Van Siclen, M.

NEWFOUNDLAND.

Wabana.—McCunn, G. B., Nova Scotia Steel & Coal Co.

NOVA SCOTIA.

Glace Bay.—Revere, J. W., Dominion Coal Co., Ltd.
Halifax.—Holbrook, E. A., N. S. Technical College.
New Glascow.—Cantley, C. L., Nova Scotia Steel & Coal Co., Ltd.
Cantley, T., N. S. Steel & Coal Co., Ltd.
Chambers, R. E., N. S. Steel & Coal Co.
Sydney.—Burchell, H. C.
Lucas, F. E., Dominion Iron & Steel Co.
Truro.—Jennison, W. F., Box 527.
West Merigomish.—Spence, H. C. E.

ONTARIO.

Almonte.—Bell, J. M.
Aura Lake, P. O.—Robbins, P. A., Hollinger Gold Mines, Ltd.
Cobalt.—Ashmore, E. P., Box 1070.
Bailey, A. C., Box 751.
Brigstocke, R. W., Drummond Mines.
Brown, A. H., Hudson Bay Mine.
Cohen, S. W., Crown Reserve Mining Co.
Cole, A. A., Temiskaming & Northern Ontario Railway Commission.
Fisher, N. R., Temiskaming Min. Co.
Hendricks, G. F., Nipissing Min. Co.
Lyman, R. H., Seneca Superior Mines, Ltd.
Nighman, C. E., Kerr Lake Min. Co., Ltd.
Randall, C. A., Nipissing Min. Co.
Watson, R. B., Nipissing Min. Co.
Copper Cliff.—Browne, D. H., Canadian Copper Co.
Macauley, R. M., Canadian Copper Co.
Mitchell, C. T.
Nicholls, J. C., Canadian Copper Co.
Silvester, G. E., Canadian Copper Co.
Graham.—Smythe, H. V., Northern Pyrites Co.
Haileybury.—Grover, M. B.
Hay, A. M.
Hotchkin, M. W., Box 356.
Hurd, W. E.
John, D.
Stonestreet, G. D.
Hamilton.—Hobson, R., Hamilton S. & I. Co.
Kingston.—Kirkpatrick, S. F., 84 Gore St.
Workman, C. W., 111 Alfred St.
Kingsville.—Webb, W. M., Box 5.
Ottawa—Bell, R., 136 McLaren St.
Brock, R. W., Geological Survey.
Cole, L. H., Dept. of Mines.
Fréchette, H., Dept. of Mines.
Haanel, B. F. C., 184 First Ave.
Wilson, A. W. G., Dept. of Mines.
St. Catharines.—Leonard, R. W.
Sellwood.—Jordan, F. A.
South Porcupine.—Crowley, T. I., Dome Mine.
Morrison, W. J., Canada Foundry Co., Ltd.
Parsons, L. A., Dome Mines Co., Ltd.
Smith, A. H.
Sudbury.—Black, J. F., Box 257.
Hibbert, E., Care J. A. Holmes.
Leckie, R. G., Torbrook Iron Co.

Toronto.—Astley, J. W., 24 King St., W.
Clark, J. M., 156 Yonge St.
Corkill, E. T., Bureau of Mines.
Coste, E., 18 Toronto St.
Fernow, B. E., Univ. of Toronto.
Ferrier, W. F., 204 Lumsden Bldg.
Flaherty, R. H., 9 Toronto St.
Forbes, D. L. H., 306 Mining Chambers.
Gibson, T. W., Bureau of Mines.
Graham, S. N., 24 King St., W.
Guess, G. A., Univ. of Toronto.
Haultain, H. E. T., Univ. of Toronto.
Jackman, H. E., 133 Dunn Ave.
Kerr, D. G., Confederation Life Bldg.
Kirkegaard, P., 2 Toronto St.
Knight, C. W., Bureau of Mines.
Lamb, R. B., 703 Traders Bank Bldg.
Longwell, A., 24 Adelaide St., W.
Loring, F. C., Home Life Bldg.
McAllister, J. E., 15 King St., W.
McMaster, A. T. C., 659 Spadina Ave.
Miller, W. G., Bureau of Mines.
Morrison, W. L., 400 Front St.
Scott, O. N., Dominion Bond Bldg.
Segsworth, W. E., 103 Bay St.
Stewart, R. B., 175 McCaul St.
Sullivan, A., Gutta Percha & Rubber Mfg. Co.
Summerhayes, M. W., 76 Home Life Bldg.
Talcott, M. G., Dominion Bond Bldg.
Tyrrell, J. B., Confederation Life Bldg.
Willmott, A. B., 404 Lumsden Bldg.
Trenton.—Motter, W. D. B., Jr., Canada Iron Mines, Ltd.
Victoria Mines. — Corless, C. V., Mond Nickel Co., Ltd.

QUEBEC.

Bergerville.—Rhodes, F. B. F.
Eustis—Passow, F. M., Eustis Mining Co.
Montreal.—Bell, J. W., McGill Univ.
Cirkle, F., 8 Stanley St.
Drummond, J. J., Canada Iron Corpn., Ltd.
Drummond, T. J., Canada Furnace Co., Ltd.
Fergie, C., 1025 Transportation Bldg.
Fisher, H. T., 411 Dorchester St., W.
Hardman, J. E., 112 St. James St.
Hart, P. E., 91 Mackay St.
Porter, J. B., McGill Univ.
Ross, J. G., 171 St. James St.
Russel, H. Y., 423 Guy St.
Stansfield, A., McGill Univ.
Westmont.—Barlow, A. E., 328 Roslyn Ave.

YUKON TERRITORY.

Dawson.—Thomas, C. A., Yukon Gold Co.
White Horse.—Marsh, H. W.
Smart, R.

MEXICO.

AGUASCALIENTES.

Aguascalientes.—Newman, B., Apartado 90.
Wagner, H. R., Apartado 137.

CHIHUAHUA.

Batopilas.—Smith, F. D. G., Santo Domingo Mining Co.
Chihuahua.—Burrows, R. H., Apartado 212.
Camphuis, G. A., Apartado 332.
Cockerell, L. M., Apartado 143.
Cuellar, S., 403 Calle Ojenaga.
Dockery, L. A., Ashton & Dockery.
Eaton, A. L., Chihuahua Min. Co.
Lawrence, S., Apartado 3.
McCausland, R. D., Apartado 299.
Posada, J., Calle de Ojinaga 21.
Pringle, C. A., Chihuahua Foreign Club.
Soest, W. E., Foreign Club.
Parral.—Bradley, D. H., Jr., Apartado 155.
Hambleton, J. W., Apartado 76.
Harrison, W. S., San Francisco del Oro Mines, Ltd.
Parral.—Continued.
Hyslop, J. E., Apartado 48.
Keller, C. H., Apartado 134.
Long, J. I., Hidalgo Min. Co.
Macdonald, B., Calle Mercaderes 33.
Macfarlane, R. W., Apartado 102.
Thompson, W., Veta Colorado M. & S. Co.
Utley, H. H., Apartado 117.
San Antonio.—Crossette, M. F.
Santa Barbara.—Dufourcq, R. G., Montezuma Lead Co.
Manahan, R. F., Minas Tecolotes.
Nagel, F. J., Apartado 19.
Santa Eulalia.—Brinker, A. C., Buena Tierra Mining Co.
Fink, W. N., San Toy Min. Co.
Temosachic.—Eye, C. M., Concheno Min. Co.
Terrazas.—Rule, J. A., Rio Tinto Copper Co.
Wilding, J., Jr., Rio Tinto Copper Co.
Urique.—Nesbitt, M.J., Becerra, Nesbitt & Co.
Villa Escobedo.—Allen, R. H., Sierra Plata M. Co.

COAHUILA.

El Fenix.—Fortnay, C. E., Fenix Coal Co. Ltd.
Jones, E. R., Fenix Coal Co.
Lampacitos.—Scheble, M. C., Cia. Carbonifera Agujita and Anexas, S. A.
Saltillo.—Carr, P. E. O., Apartado 64.
Cavazos, E., 2 a de Allende No. 20 ½.
Rodriguez, J, C., Apartado 87.
Thomae, W. F. A., Apartado 64.
Torreon.—Garza-Aldape, J. M.
Harms, E., Cia. Metalurgica de Torreon.
Polkinhorn, E. J., Apartado 12.

COLIMA.

Manzanillo.—Thomas, M. L.

DURANGO.

Asarco.—Newell, G. S.
Birimoa.—Cook, E. H., Minas de Birimoa.
Durango.—Adams, W. C., Apartado 1.
Palacios, J. G., 1a Calle del Coliseo 2.
Parker, C. F., Apartado 208.
Viggers, W., Calle Guadalupe 75.
Wilson, G., Apartado 188.
Gabriel.—Jeffrey, R. H.
Guanacevi.—Ayton, E. F., Apartado 16.
Cobb, H. McL.
Hageman, W., Cia. Minera Exploradora y Explotadora de Guanacevi, S. A.
Thomas, D. R., Pridilecta Min. Co.
Indé.—McCart, R., Jr., Indé Gold Mining Co.
Mapimi.—Hamilton, F. C., Cia. Minera de Peñoles.
Stoeffel, P. K., Cia. Minera de Peñoles.
Ojuela.—Lucke, P. K., Cia. Minera de Peñoles.
Weniger, R., Cia. Minera de Peñoles.
Pedriceña.—Auer, C. I.
Promontorio. — Bunker, C. E., Estacion Chinacates.
San Dimas.—Caldwell, F. B., Candelaria Cons. Mex. Mining Co.
Goetter, F. B., Mexican Candelaria Co., S.A.
Rawlings, S. L., San Luis Min. Co.
San Lucas de Ocampo.—Fowles, C., Durango M. M. & E. Co.
Topia.—Lawrence, T. J.
Rubel, M. L., Pilones Min. Co.
Velardena.—Adams, R. E.
Hamilton, W. J., Am. Smelters Securities Co.
Kepner, R. B.
Rone, L. A., Apartado 36.
Ventanas.—Fyfe, A.

FEDERAL DISTRICT.

Mexico City.—Adams, H., Gante 8.
Anderson, R. H., Apartado 866.
Arozarena, R. M. de, 7a Chihuahua 168.

Mexico City.—Continued.
Babb, P. A., Ave. Cinco de Mayo No. 32.
Barker, H. A., Ave. Cinco de Mayo No. 32.
Braschi, V. M., Apartado 830.
Bromly, A. H., Apartado 232.
Bullock, L. N. B., Apartado 447.
Chamberlain, J. R., 4a Tobasco No. 122.
Chevrillon, L., Apartado 18 Bis.
Chippendale, A., American Club.
Cosgro, J. P., Apartado Postal 447.
Cremer, F., Apartado 1939.
Denny, H. S., 32 Cinco de Mayo.
Dieffenbach, H. M., Apartado 793.
Du Bois, E., Box 5115.
Ellis, R. W., Apartado 5317.
Enos, H. C., Apartado 1583.
Espinosa, L., 3a Gabino Barreda 56.
Fulton, C. A., University Club.
Girault, E., 3a Calle Prim No. 56.
Grothe, A., Apartado 2554.
Heberlein, K. B., Apartado 733.
Helm, J. D., Apartado 1277.
Hochschild, M., Apartado 733.
Hoffmann, K. F.
Kleinschmidt, C., Calle Orizaba 42.
McCarty, G. J., Avenida de San Francisco 12.
McGrath, J., Apartado 5115.
Martinez, A., Box 307.
Moore, R. R., Apartado 1939.
Musgrave, E. C., Apartado 119 Bis.
Newcomb, C. S., Ave. 5 de Mayo No. 2.
Ordonez, E., 2a General Prim 43.
Prömmel, H. W. C., 1a Calle Madrid No. 15.
Raymond, R. M., Apartado 740.
Ryder, T. J., Apartado 1203.
Reynoso, J. J., Apartado 768.
Robinson, H O., 2a Bucareli 35.
Sandifer, H. C., American Club.
Schlereth, C. I., Apartado 266.
Sedgwick, A. E., 2a Calle de Bucareli 35.
Sellerier, C., 92, 4a Calle de Carpio.
Smith, E. A., 3a Dinamarca 50.
Spence, G., Calle Gante 8.
Stadelmann, G., Apartado 529.
Swain, H. L., Avenida Cinco de Mayo No. 1.
Villarello, J. D., 5a del Cipres 2728.
Warne, H. H., Calle Privada del Alamo 23.
Yeandle, W. H., Jr., 411 Edificio de la Mutua.

GUANAJUATO.

Guanajuato.—Aguilar, P., Sopeña 13.
Ambrosius, C. E., La Presa 79.
Ambrosius, J. R., Apartado 11.
Bryant, G.W., Apartado 86.
Butler, J. S., Apartado 90.
Furness, D., Apartado 2.
Herr, I., Apartado 49.
McCord, W. H., Apartado 67.
MacDonald, J., Apartado 33.
Miller, H. H., Apartado 95.
Munro, D. M., Apartado 37.
Rhew, J. W., Apartado 33.
Smith, H. P., Apartado 55.
Wherry, H. P., Apartado 25.
San Luis de la Paz.—Buchanan, W. C.

GUERRERO.

Taxco.—Gorow, B.

HIDALGO.

Pachuca.—Alatorre, R. F., 3a Calle de Matamoras No. 5.
Barnum, W. E., Apartado 92.
Calland, D. S., Cia. de Real del Monte y Pachuca.
Hollis, G. C., Apartado 57.
Hughes, W. W., Cia. Real del Monte.
Landero, C.F. De, Real del Monte Min. Co.
Ough, S. W., Apartado 104.
Rose, H., Cia. de Santa Gertrudis.
Solomon, T., Apartado 39.
Stockdale, A. H., Apartado 21.
Van Law, C. W., Cia. Real del Monte y Pachuca.
Real del Monte.—Wilkinson, B. A., Apartado 7.

JALISCO.

Bolanos.—Oldfield, F W., Mexican Mines Co.
Etzatlan.—Grove, I., Amparo Min. Co.
Guadalajara.—Baird, L., Hidalgo 1360 (Altos).
Boyd, F. J., Apartado 176.
Dick-Cleland, A. F., Apartado 270.
Draper, C. H., Apartado 157.
Slattery, M. J., Apartado 77.
Hostotipaquillo. — Hoadley, C. B., Cia. Minera El Favor.
Pentland, W. J., Amajac Mines Co.
Thomson, E.
Magdalena.—Brooks, J. McM., Jr., Cinco Mines Co.
San Sebastian.—McCann, F., El Tajo Min. Co.

LOWER CALIFORNIA.

Triunfo, La Paz.—Nahl, A. C., Progreso Mining Co.

MEXICO.

El Oro.—Aldasoro, A., Box 34.
Allan, T. A., Apartado 17.
Bossuat, H., Apartado 34.
Main, A. F., El Oro Min. & Ry. Co., Ltd.
Minsch, W. C., Hotel Jardin.
Rhodes, C. E., Apartado 30.

MICHOACAN.

Angangueo.—Edelen, A. W., Angangueo Unit of A. S. & R. Co.

NUEVO LEON.

Monterey.—Austin, J. F., Apartado 101.
Bolles, M. N., Apartado 101.
Brennon, J. C., Apartado 53.
Bridge, S. D., Apartado 50.
Carnahan, J. S., Mexican Lead Co.
Chase, F. D., Apartado 27.
Fairchild, S. A., Apartado 65.
Hernandez, M. F., Matamoros 212.
Maiz, J., Apartado 102.
Schmidt, H. C., Apartado 327.
Tuschka, O., Fundicion 2.
Villaldama.—Salisbury, E. F.

OAXACA.

Oaxaca.—Clark, M., Apartado 105.
Comings, G. R., Apartado 126.
Elton, H. L.
Sturges, H.
Woods, F. J., Apartado 161.
Woolrich, A. H., Box 27.
Ocotlan.—Lehmer, F. W., Cia. Minera Zapoteca.
Sola de Vega.—Gee, E., Mina "El Carmen."
Taviche.—Hamilton, C. A., Cia. De Diversidades, S. A.

PUEBLA.

Aire Libre. — Cromwell, R. H., Teziutlan Copper Co.
Saunders, T. S., Teziutlan Copper Co.
Beristain.—Harris, A. L.
Puebla.—Brinsmade, R. B., Apartado 185.

SAN LUIS POTOSI.

Charcas.—Longan, W. B., Am. Smelt. & Refin. Co.
Matehuala.—Caypless, W. S., Am. Smltg. & Refg. Co.
Dingwall, W. B. A., Apartado 16.
Grabill, C. A., Cia. Met. Nacional.
Wentworth, I. H., Minas Santa Maria de la Paz.
Rioverde.—Galan, C. F.

San Luis Potosi.—Alexander, C., Apartado 320.
Brown, D. C., Apartado 132.
Cuevas, L. G., Apartado 148.
Grave, E., 2a Allende 20.
Ipina, R., Apartado 30.
Koelle, C., Cia. Metalurgica Mexicana.
Megraw, H. A., Apartado 308.
Williams, J. M., Jr., Apartado 132.
Williams, R. B., Minas Dolores y Anexas.

SINALOA.

Mazatlan.—Showers, C. H., Apartado 68.
Rosario.—Beals, R. L., Minas del Tajo.
Faneuf, S. C.
Hubbard, H. J., Minas del Tajo.
San Blas.—Tays, E. A. H.
San Jose de Gracia.—Rhodes, W. B., Cia. Minera Jesus Maria y Anexas.
Underwood, A. J.
Wynne, A. H. P., Calabacillas Min. Co.

SONORA.

Cananea.—Chase, C. C., Apartado 12.
Hart, V. A., Cananea Cons. Copper Co.
Ricketts, L. D., Cananea Cons. Copper Co.
Chivatera.—Duffin, J., Box 204.
Esperanza.—George, J. G. G.
Fundicion.—Kirkland, T. C., Cia. Met. y Refinadora del Pacifico, S. A.
Hermosillo.—Hart, C. R.
Wanless, M. W., Box 20.
Wendler, H., Apartado 87.
La Dura.—Palsgrove, H. G., La Dura M. & M. Co.
Magdalena.—Besley, J. C., Apartado 31.
Pomeroy, H. G., Black Mountain Min. Co.
Nacozari.—Hyder, C. A.
Nacozari de Garcia.—Mosier, McH., Box 35.
Nogales.—Sandoval, P., P. Sandoval & Co.
Poza.—Dalton, M. P.
Tonichi.—Pomeroy, W. E., Cia. de Minas de Mexico.
Yzabal.—Budrow, L.R., Lucky Tiger Min. Co.
Heron, C. L., El Tigre Mine.
Mishler, R. T.

TAMAULIPAS.

Tampico.—Hayes, C. W., Cia. Mexicana de Petroleo, "El Aguila," S. A.
Jeffreys, G., Apartado 8.

VERA CRUZ.

Furbero.—Slusher, D., Oil Fields of Mex. Co.
Minatitlan.—Laurie, F. C., Cia. Mexicana de Petroles, "El Aguila," S. A.
Orizaba.—Stacpoole, S. W., 3d Ave. de la Libertad No. 5.
Tuxpam.—Payne, A. C., Apartado 38.

ZACATECAS.

Concepcion del Oro.—Kenyon, P., Mazapil Copper Co.
Jackson, F. H., Apartado 12.
Palmer, W. J. A., Box 11.
Fresnillo.—Sproat, A. D., Fresnillo Min. Co.
Van Zwaluwenburg, A., Fresnillo Min. Co.
Guadalupe.—Emery, A.B., La Fe Mining Co.
Mazapil.—Varela, F. R.
Sombrerete.—Coxe, C. E., Apartado 21.
Dixon, A. G., Sombrerete Mining Co.
Heldt, H. L., Sombrerete Min. Co.

WEST INDIES.

BARBADOS.

Watkins, St. Michael.—Emtage, R. H.

CUBA.

Camaguey.—Turner, N.P., Hotel Camaguey.
Felton.—Patterson, S. B., Spanish-American Iron Co.
Wilson, F. C., Spanish-American Iron Co.
Guamo.—Mason, J. G.
Havana.—Villalon, J. R., 37 Cuba St.
Matanzas.—Polledo, Y., Manzaneda 16.
Santiago de Cuba.—Aguilera, P.
Bruns, C. L., Jr., El Cobre Mines.
Chibas, E. J., Marina Alta 4.
Chibas, L. F., Calvario baja 4.
Cox, J. S., Jr., Spanish-American Iron Co.
Emerson, E. H., Cuba Copper Co.
Magee, J. F., El Cuero Mines.
Pfeiffer, G. W., Spanish-American Iron Co.
Whitaker, DeB., Juragua Iron Co.

CENTRAL AMERICA.

COSTA RICA.

Abangarez.—Gillespie, F. M., Abangarez Gold Fields.
Porter, J. C., Abangarez Gold Fields.
Mirimar.—Yonge, A. M., La Union Mine.
Montezuma.—Price, H. B., Montezuma Mines.
San Jose.—Cardenas, A., Apartado 750.
Crespi, R. A., Care J. M. Keith.
Hanckel, R. S., Apartado 750.
Purdy, H. T., Apartado 750.
San Mateo.—Keiller, A. G., Aguacate Mines.
Spilsbury, P. G., Aguacate G. M. Co.

HONDURAS.

Belize.—Starkey, T. R., Care King & Co.
Rosario.—Sweetser, A. L., N. Y. & Honduras Min. Co.
San Juancito.—Gordon, A. R., N. Y. & Honduras Rosario Min. Co.
Mann, W. S., N. Y. & Honduras Rosario Min Co.
Santa Rosa.—Keller, A. H.
Tegucigalpa.—Montis, E. de.

NICARAGUA.

Matagalpa.—Nobs, F. W., La Leonesa.

SALVADOR.

Divisadero.—Swanquist, G. A., Butters Divisadero Co.

SOUTH AMERICA.

ARGENTINE REPUBLIC.

Buenos Ayres.—Washburne, C. W., Poste Restante.
Castano Nuevo.—Allen, J. A., Minas del Castaño.
Chilecito.—Carlyle, E. J., Famitima Co.
Jenks, A. W.

BOLIVIA.

Chocaya.—Tatton, E. H., Cia. Minera y Agricola Oplora de Bolivia.
La Paz.—Germann, F.
Seibert, P. A., Andes Tin Co.
Ormo.—Fraser, L., Apartado 168.
Oruro.—Grondijs, H. F., Cia. Minera de Oruro.
Venables, H. L.
Potosi.—Hohagen, G.
Maurice, J., Royal Silver Mines of Potosi, Bolivia, Ltd.

BRAZIL.

Amazonas.—Crandall, R., Frazendas Nacionaes Do Rio Branco.
Bahia.—Rio, J. P.
Encruzilhada.—Scheffler, F. G.
Minas Geraes.—Chalmers, G., Morro Velho, Villa Nova de Lima.
Lustosa, J. De A., "Morro de Mina," Manganese Min. Co., Lafayette.
Rio de Janeiro.—Derby, O. A., Praia Vermelha.
Lisboa, M. A. R., 426 Praia de Botafogo.
Miranda, J. de, Rua Larangeiras 304.
Olyntho dos Santos Pires, A., 150 Rua Marquez de Abrantes.
Phillips, L., Rua de Candelaria 8.
Robinson, G. H., Jr., Care Wilson, Sons & Co.
Scott, W. M. H., Box 834.

CHILE.

Antofagasta.—Thompson, M. M., Care Duncan, Fox & Co.
Cachinal.—Ives, G. P.
Chuquicamata.—Hellmann, F.
Montandon, G. E.
Collahuasi.—Holberton, W. T., Soc. Francaise de Mines de Lenire.
Copiapo.—Dale, W. C., Casilla 230.
Fergie, G.
Radcliffe, A.
Graneros.—Langford, F., Braden Copper Co.
La Serena.—Diaz-Ossa, I., Escuela de Minera.
Iquique.—Young, J. S., Casilla 41.
Lota.—Hinricksen, H. T., Lota Copper Wks., Fundicion de Cobre.
Panulcillo.—Gibbons, C. A., Central Chile Copper Co.
Higgins, T. F., Central Chile Cop. Co.
Stevens, J. V., Central Chile Copper Co.
Rancagua.—Colley, B. T., Braden Copper Co.
Douglass, R. E., Braden Copper Co.
Fleming, E. P., Braden Copper Co.
Marsh, R., Jr., Braden Copper Co.
Turner, W. J., Braden Copper Co.
White, R. T., Braden Copper Co.
Santiago.—Barclay, T. H., Casilla 447.
Gmehling, A., The University.
Lamb, M. R., Casilla 2653.
Reid, R. S., Calle Jefré 422.
Valparaiso.—Martin, A. W., Casilla 181.

COLOMBIA.

Banco.—Blackmar, F. H., Doña Maria M. & M. Co.
Barranquilla.—De Hora, M. H., Care American Consul.
Cartagena.—Granger, H. G.
Mangangue.—Small, H. B., Care Olimpo del Valle.
Medellin.—Posada, J. de la C.
Puerto Berrio.—Tilly, A., Frontino Bolivia G. M. Co., Ltd.
Santana.—Crease, H. H.
Tuquerres.—Gamba, F. P.

ECUADOR.

Guayaquil.—Kelley, A. L., So. American Development Co.
Mather, T. W., Casilla 655.
Van Isschot, P. E. C., Casilla 240.
Salango.—Hanley, J. A., Jr., Salango Export Co.

PERU.

Arequipa.—Fox, A., Jr., Caylloma Silver Min. Co.
Casapalca.—Ross, H. W., Bachus & Johnston Co.
Cerro de Pasco.—Couldrey, P. S., Cerro de Pasco Min. Co.
Novoa, B., Apartado 12.
Wilson, J. B., La Empresa Socavonera del Cerro de Pasco.
Lima.—Balta, J., Mogollon 13.
Elguera, M., Calle Washington 200.
Figari, A., Apartado 516.
Fuchs, F. C., Apartado 981.
Laroza, E. E., Apartado 777.
Masias, M. G., Sociedad de Ingenieros.
Paz-Soldan, F. A., Miraflores-Alameda 27.
Reed, D. C., Avenida Terry 160, Baranco.
Strauss, L. W., Apartado 1227.
Morococha.—Murdoch, J. A. W., Morococha Min. Co.
Pocock, C. W., Santa Clara Mines.
Negtitos.—Evans, H. A., London & Pacific Petroleum Co.
Oyon.—Dunstan, S. P., Hacienda Quichas.

GREAT BRITAIN.

ENGLAND.

Addiscombe.—Lund, I., 64 Clyde Road.
Andover.—Mackilligin, A. M., Hurstbourne Tarrant.
Ashstead.—Nichols, H. G., Mawmead.
Bedford.—Barber, G. M., 42 Clapham Rd.
Berkhamsted.—Wilson, N., 68 Cross Oak Rd.
Bispham.—Yates, A., 30 Frederick St.
Brassington.—Breakell, T.
Bromly.—Holloway, W. S., "The Valley."
Camborne.—Ivey, J. H., Stray Park House.
Thomas, A. E., Basset Road Villas.
Vivian, G. T., Pengegon House.
Charlton-on-Medlock.—Macfee, R., 15 Alexandra Grove.
Chingford.—Loram, S. H., 49 Buxton Rd.
Chislehurst.—Jones, W., Redhill House.
Cranbrook.—Hancock, S., Kennel Holt.
Darwen.—Holgate, T. E., Darwen & Mostyn Iron Co., Ltd.
Dudley.—Hughes, H. W., 24 Wolverhampton St.
Eccles.—Anderson, J. S., "Launox."
Edgbaston.—Cadman, J., The University.
Euhurst.—Frecheville, W., "High Wykehurst."
Ewell.—Willis, A. B., Garbrand Hall.
Exeter.—Cooper, J., 52 Pinhoe Rd.
Faversham.—Fielding, C. W., "Belmont."
Hale.—West, H. E., Care Barclay & Co.
Harrow.—Hall, G., 12 Sheepcote Rd.
Helston.—Gordon, E., "Boswin," Porkellis.
Hove.—Ashmore, G. P., 109 Lansdowne Pl.
Ipstones.—Boucher, A. S., Sharpcliffe Hall.
Kenilworth.—McMillan, A. J., St. Andrews.
Kingston.—Russell, W., Woodstock, Grove Crescent Rd.
Lelant.—Farina, R.
Leeds.—Bowen, D., University of Leeds.
Lindley.—Skewes, E., 47 East St.
Liverpool.—Pearce, R., 6 Beach Lawn, Waterloo.
Pearson, J. E., 118 Princess Rd.
London.—Addie, R., Suffolk House.
Agnew, J. A., Care Union Bank of Australia, Ltd.
Ahlers, R. O., Norfolk House.
Allan, J. F., 62 London Wall.
Arkell, H. J., 29 Clapham Mansions.
Atherton, T. W. T., 62 London Wall.
Baker, C. J. S., 15 Eldon Rd.
Barney, M. T., 155 Fenchurch St.
Barnett, W. J., 3 London Wall Bldgs.
Bartlett, W. S., 80 Bishopsgate.
Bayliss, R. T., 11 Cornhill.
Bird, R. M., 47 Parliament St.
Blandy, S. H. B., 35 Queen Victoria St.
Boddington, H. D., Royal Colonial Inst.
Borrow, F. W., 33 Ely Pl.
Brodrick, C. T., 62 London Wall.
Brown, R. G., 62 London Wall.
Burls, H. T., 15 Victoria St.
Burnham, M. H., 6 Broad St. Pl.
Carlyle, W. A., Imperial College of Science and Technology.
Carroll, L. D., 38 Victoria St.

London.—Continued.
Cautley, A. O., 24 Walbrook.
Chaplin, G. P., 63 Holland Park Ave.
Charleton, A. G., 11 Queen Victoria St.
Cobbe, H. N. G., 86 York St.
Cooke, L. H., Royal School of Mines.
Crane, G. A., 6 Gt. Winchester St.
Currie, D., 7 Laurence Pountney Hill.
Currie, J. M., Laurence Pountney Hill.
Dudgeon, N. M., 7 Great Winchester St.
Duncan, G. S., 28 St. Swithins Lane.
Durant, H. T., 3 London Wall Bldgs.
Ellan, A. S., 30 Birkbeck Rd., Acton.
Elliot, J. L., 54 New Broad St.
Fairbairn, A. J., 89 Onslow Gardens.
Fairbairn, G., 18 Welbeck Court.
Farrant, J. C., 563 Salisbury House.
Fawns, S., 26 Sussex Mansions.
Feldtmann, W. R., 138 Salisbury House.
Fernau, J. C., West Dulwich.
Finch, H. W., The Atheneum.
Fraser, C., 1 Queen Victoria St.
Frecheville, R. J., 544 Salisbury House.
Gibb, A., Friars House.
Gilchrist, P. C., Reform Club.
Goodland, G., 17 Gracechurch St.
Gordon, J., 22 So. Audley St.
Gordon-Firebrace, W. E., 812 Salisbury House.
Griffiths, A. P., 781 Salisbury House.
Griffiths, J. N., Griffiths House.
Hadfield, Sir R. A., 22 Carlton House Terrace.
Hawxhurst, R., Jr., 36 Bishopsgate St.
Hay, H., 8 Old Jewry.
Henderson, J. A. L., Devonshire Club.
Herzig, C. S., 412 Salisbury House.
Hinman, B. C., Coventry House, South Pl.
Hoffmann, J. I., 216 Moorgate Sta. Chambers.
Hooker, W., 3 Lombard St.
Hooper, E., 3 London Wall Bldgs.
Hoover, H. C., 1 London Wall Bldgs.
Hoover, T. J., 1 London Wall Bldgs.
Hughes, A. D., 29 Holland Park.
Hunter, H., 1 St. Mary Axe.
Huston, H. L., 9 Upper Hamilton Terrace.
Jack, J., Salisbury House.
James, A., 2 Broad St. Place.
James, C. H., 62 London Wall.
James, J. H. C., Finsbury House.
Johnson, R. R., 38 Heath Hurst Rd., Hampstead.
Jones, C. H., 28 Bourne Rd.
Jones, H. E., The Lodge, Ealing.
Kennedy, N., 3 Lombard St.
Kingston, C. B., Wocester House.
Kuehn, A. F., 1 London Wall Bldgs.
Little, A., 4 London Wall Bldgs.
Llewellyn, A., 62 Queen St. Place.
Loring, E. A., 62 London Wall.
Loring, W. J., 62 London Wall.
Louis, D. A., 123 Pall Mall.
Low, V. F. S., Care Natl. Bank of Australasia.
McCarthy, E. T., 10 Austin Friars.
McDermott, W., 3 London Wall Bldgs.
McDougall, W. D., 20 Bedford Pl.
McKillop, J., 16 Grape St.
MacArthur, J. S., 6 Broad St. Place.
Macdonald, A. C., 54 New Broad St.
Madge, W. C., 62 London Wall.
Maitland, G. C., 22 Clareville Grove.
Mannheim, E. A., Salisbury House.
Marriner, J. T., Birbeck Bank, Chancery Lane
Marriott, H. F., 1 London Wall Bldgs.
Means, J. H., 1 London Wall Bldgs.
Merricks, F., 5 Great Winchester St.
Mitchell, D. P., 1 London Wall Bldgs.
Mitchell-Roberts, J. F., 8 Eliot Hill, Blackheath.
Morris, F. H., 8 Union Court.
Moubray, J. M., 98 Leadenhall St.
Nissen, P. N., 5 Victoria St.
Pearse, A. L., Worcester House.
Perkins, W. G., 62 London Wall.
Picard, H. K., 44 London Wall.
Recknagel, R., 13 Austin Friars.
Reid, A. S., 11 Abchurch Lane.
Reynolds, G. B., 15 Victoria St., Westminster.

London.—Continued.
Rich, W., 1 Cambridge Gate.
Rickard, E., 819 Salisbury House.
Rickard, T. A., 819 Salisbury House.
Ridge, H. M., 62 London Wall.
Robeson, A. M., 1 London Wall Bldgs.
Rolker, C. M., 1 Leadenhall St.
Rosewarne, D. D., Royal Colonial Inst.
Rumbold, W. R., Union Club.
Sandberg, C. P., 9 Bridge St.
Sanders, B. H., 547 Upper Thames St.
Schmiedell, J. H., Market Bldgs.
Scott, H. K., 46 Queen Victoria St.
Scrutton, T. C., 18 Billiter St.
Seal, A. E., 8 The Grove, Muswell Hill.
Selkirk, W., 62 London Wall.
Shockley, W. H., 1 Queen Victoria St.
Stanley, J., 147 Holland Rd., Kensington.
Stewart, A., Salisbury House.
Stewart, H. R., 5 Rodway Rd., Roehampton
Stewart, P. C. A., 51 Redcliffe Sq.
Teale, J. W., 352 Salisbury House.
Thompson, W., 84 Regents Park Road.
Thorne, W. E., 408 Salisbury House.
Thurston, E. C., A. Goerz & Co., Austin Friars.
Titcomb, H. A., Salisbury House.
Turner, G. D. B., 98 Leadenhall St.
Turrell, H., Royal Societies Club.
Wallis, H. B., 48 Holland Park.
Webb, H. H., 8 Old Jewry.
Weigall, A. R., Care Commercial Banking Co. of Sydney.
Weinberg, E. A., 5 London Wall Bldgs.
Wescott, W. P., Broadway Court.
Western, C. R., Broadway Chambers.
Wilbraham, A. G. B., 2 Laurence Pountney Hill.
Wilkins, L. H., Finsbury Pavement House.
Wilkinson, A., St. Stephen's Club.
Wilkinson, D., Salisbury House.
Wilkinson, W. F., 12 St. James Pl.
Williams, J. R., 10 Clements Lane.
Wilmoth, L. J., Salisbury House.
Woakes, E. R., 6 Queen St. Pl.
Wraight, E. A., Royal School of Mines.
Wright, L. T., Junior Constitutional Club.

Middlesbrough.—Hawdon, W., Newport Iron Works.
Stead, John E., 11 Queens Terrace.

Newcastle-upon-Tyne.—Louis, H., 4 Osborne Terrace.

Newquay.—Clemes, J. H., "Cheriton," Mount Wise.

Northallerton.—Bell, Sir H., Rounton Grange.

Penryn.—Rickard, A. J., Stokember House.

Port Clarence.—Johnson, W. L.

Reading.—Clarke, A. C., Midgham House.

Redruth.—Chenhall, J. W., Illogan.
Prout, W. M., Claremont Rd.
Provis, R., 14 Penventon Terrace.

Rotherham.—Steel, H., Phœnix Steel Wks.

Roundhay.—Pullon, J. T., 75 Victoria Rd.

St. Austell.—Hodge, A. C., Care James Floyd.

St. Mawes.—Turney, A. R., Sea View.

Seaton Carew.—Moulden, J. C., Central Zinc Co., Ltd.

Sheen.—Thame, J., The Maisonette, Derby Rd.

Sowerby.—Brown, D. P., The Old House.

Stoke-on-Trent.—Crum, J. R., Trentham.

Sutton.—Dixon, J. T., "Duasdale," Mulgrave Rd.

Swansea.—Corfield, R. G. W., 5 Richmond Villas.

Tavistock.—Daw, J. W., Walreddon Manor.

Tunbridge Wells.—Colquhoun, J., 31 Ferndale.

Tunstall Rectory.—Horwood, C. B.

Twickenham.—Osborn, H. H., 9 St. Stephens Gardens.

Ulverston.—Linck, F. W., Lindal Moor Mines.

Wallington.—Dowe, J. H., 9 Rose Mount.
Merrett, W. H., "Hatherley," Grosvenor Rd.
Waybridge.—Pettit, A. E., Oatlands Park.
West Hartlepool.—Thomlinson, W., Seaton Carew Iron Wks.
West Horsley.—Evans, G. S., Care Mrs. J. Harris.
Weston-Super-Mare.—Powel, G. H., Penrallt, Trewartha Pk.
Whitchurch.—Wilkinson, W. F., Hurstbourne Priors.
Whitehaven.—Scoular, A. C., "Fernacre."
Woking.—Johns, J. H., "Kenwyn," Guildford Rd.
Workington.—Graham, T. W., Mossbay House.

IRELAND.

Balrath.—Osborne, F. D., "The Grove."
Clonskea.—Pollok, J. H., 6 St. James Terrace.
Dublin.—Woollcombe, R. L., 14 Waterloo Rd.

SCOTLAND.

Blackrock.—Geoghegan, R. H., Rockfield.
Coatbridge.—McCosh, A. K., Gartsherrie Iron Wks.
Edinburgh.—Anderson, A., 27 Inverleith Row.
Balfour, J. F., Eversley, Portebello.
Simpson, J. C., The Avenue, Greenhill Gardens.
Glasgow.—Crookston, A. W., 188 St. Vincent St.
Dempster, W., 1 Kings Park Ave., Mount Florida.
Hunt, B., 121 W. George St.
Leslie, H. M., 10 St. Andrews Drive, Pollokshields.
Mavor, S., 47 Broad St., Mile-end.
Miller, J., 53 Newlands Rd.
Rutherford, W. P., Jr., 136 W. George St.
Neuck.—Murdoch, J. V. B.
Tranent.—Burt, A., Elphinstone Collieries.

WALES.

Aberdare.—Lord Merthyr of Senghenydd, "Mardy."
Baglan.—Gibbs, G. H., "Glan y Mor."
Brymbo.—Hollings, J. S.
Cardiff.—Thomas, H. S., "Hillside," Penylan
Penarth.—Reese, A. K., Red House, Victoria Rd.
Penmaen.—Hopkins, G. V., Nicholaston House.
Swansea.—Vivian, H., Hafod Wks.

EUROPE.

AUSTRIA.

Leoben.—Hoefer, Prof. H.
Vienna.—Böhler, R. F., I, Elisabethstrasse 12.

BELGIUM.

Antwerp.—Hauber, M., Jr., Rue de Beucker 15.
Hunt, A. J., Rue de Beucker 15.
Bruxelles.—Sahlin, A., 52 Rue des Congrès.
Shaler, M. K., 4 Montague du Parc.
Hoboken-les-Anvers.—Mashmeyer, H.
Louvain.—De Deken, A., 64 Station St.

FINLAND.

Orijaarvi.—Daniell, J.

FRANCE.

Hautes Pyrenees.—Hugon, E. C., Mines de Pierrefitte.
Houlgate.—Milou, H.
Paris.—Armas, M. Th., 2 Rue de la Verrerie 2.
Batz, R. de, 2 Ave. Camoëns.
Bel, J, M., 90 Rue d'Amsterdam.
Bret, J, le, 57 Ave. D'Antin.
Capdeville, J, E., 80 Rue Taitbout.
Cardozo, H. A., 54 Rue de Prony.
Chambost, P, J, E, E., 28 Ave. de Suffren.
Chiapponi, M., 49 Rue de Courcelles.
Clerc, C., 92 Rue Jouffrey.
Collin, E. C., 49 Rue de Miromesnil.
Dorion, F. J., 24 Rue Alain Chartier.
Fevre, L. F., 1 Place Possoz. XVIe.
Garfield, A. S., 67 Ave. de Malakoff, XVIe.
Gennes, A. A. de, 2 Rue Mignet.
Goupillière, H. de la, 56 Rue de Vaugirard, (VIe arrond).
Iweins, P., 48 Rue Cambon.
Johnston, J. H., 31 Blvd. Haussmann.
Knoertzer, H., 56 Rue Balagny.
Le Chatelier, Prof, H, L., Ecole des Mines.
Ledoux, F., 12 Place Vendôme.
Levat, D., 174 Blvd. Malesherbes.
Pourcel, Alexandre, 2 Square du Roule.
Robellaz, F., 45 Rue de Pomereu.
Wendel, C. de, 56 Ave. Hoche.
Wurgler, A., 7 Rue Viète.
Saint Pierre Montlimart.—Strap, G., des Mines de la Bellière.

GERMANY.

Aachen.—Borchers, W., Royal College of Technology.
Schwemann, A., Crefelder Str. 41.
Wüst, F., Ludwigs Allee 47.
Berlin.—Blumenau, H., Landhausstrasse 48, Wilmersdorf.
Koerting, B., Badensche Str. 4.
Martin, A. A., Handelstr. 6, N. W. 23.
Schumacher, W., Haberlandstr. 2.
Wolff, F. M., 2 Jaegerstrasse, W.
Beuthen.—Stähler, H., Heinitzgrube.
Bonn.—Kruemmer, A. W.
Breslau.—Simmersbach, O., Parkstrasse 21.
Charlottenburg.—Doeltz, J. G. F. O., Technische Hochschule Berlin.
Riedt, C., Kant-Str. 38a.
Clausthal.—Hoffmann, R., Bergstrasse 948 I.
Coblentz.—Oswald, W., Rheinzollstrasse 6.
Dortmund.—Maltitz, E. von.
Dresden.—Peschel, W. M., Mederloessnitz, C., Koernerweg 6.
Dusseldorf.—Schroedter, Dr.Jng. h. c. Emil, Breitestrasse 27.
Eisleben.—Franke, R., Mansfeld C. M. & S Co.
Vogelsang, K., Mansfeld Copper Co.
Essen-Ruhr.—Loewenstein, H. von. u. zu, 2 Friedrichstrasse.
Frankfort.—De Neufville, R., Bockenheimeranlage 45.
Naumann, E.
Freiberg.—Beck, Prof. Richard.
Schiffner, C., Donatsring 1 i
Hanover.—Brendel, R., Kaiser Wilhelm Str. 24.
Weiskopf, A., Goetlinger-Chaussee 18.
Jena.—Hahn, O. H., Schillerstrasse 6.
Leipzig.—Preusse, C. M. E., Forest Strasse 2 p.
Littenweiler.—Reichard, M.
Lubeck.—Draeger, B., Draegerwerk.
Remscheid.—Boker, H. G., Bergische Stahl Industrie.
Mannesmann, R.
Siegen.—Macco, H.
Volkingen.—Rochling, H., Rochling Iron & Steel Wks.
Wiesbaden.—Dyckerhoff, O. L. W., Victoria Str. 13.
Massenez, J., 10 Humboldt strasse.

HUNGARY.

Budapest.—Moore, E. W., Ferencz Jozsef-Rakpart 17.

ITALY.

Grosseto.—Benson, A. J.
Firenze.—Cerrina-Feroni, P.
Ingurtosu.—Wright, C. W.
Monteponi.—Ferraris, E.
Savona.—Fera, C., Società Siderurgica.
Sturla.—Marengo, P.

NORWAY.

Kristiania. — Hybinette, V., Somerrogaden 15
Tromso.—Edelsteen, K. J.
Turner, S.
Trondhjem.—Gilson, K. L., Arctic Coal Co.

PORTUGAL.

Guarda.—Youd, H.
Lisbon.— Johnston, R. B., 20 Rua de S. Paulo 1°.

RUSSIA.

Baku.—Fegraeus, T., Nobel Works.
Batum.—Mattievich, E., F. A. Mattievich & Co.
Van Liew, W. R., Caucasus Copper Co.
Ekaterinburg.—Draper, F. W., Verk Isetz Corpn.
Kyshtim.—Botsford, R. S., Nicolaevo Povdinsk Est.
Jones, T. J., Kyshtim Mining Works.
Stickney, A. W., Kyshtim Mining Works.
Mramorskaya Sta.—Stines, N. C., Polefskoy Zavod.
Orsk. — Truschkoff, N., Eidertinsky Gold Mines.
St. Petersburg.—Goldberg, J., Kamennoostrov Ave. 9.
Hutchins, J. P., 20 Galernaya.
Meyerovitch, J. A., 28 Morskaya.
Mitinskij, A. N., V. O. 2, line V. 3.
Tschernoff, Dimitry C., 25 Rue Pessotchnaya.

SPAIN.

Bilbao.—Careaga, C. R., Sociedad Española del Castillo de las Guardas.
Carril.—Lessner, C. B.
Linares.—Tonkin, J. J., La Tortilla Lead Smelt. Works.
Rio Tinto.—Browning, W. J., Rio Tinto Co., Ltd.
Palmer, R. E., Rio Tinto Co.
Valdelamusa.—Collins, H. F., Huelva Copper & Sulphur Mines, Ltd.
Turner, C. E., Huelva Cop. & Sul. Mines.
Villanueva de las Minas.—Maurice, J., Hacienda de Monte Horcaz.

SWEDEN.

Bofors.—Wijkander, B. E., Bofors Guttsparig Co.
Falun.—Yngstrom, L.
Gothenbourg.—Hamfeldt, G. K., S. Hamngatan 17.
Langlot.—Anderson, M. L.
Lund.—Johnson, P.
Malmberget.—Wallin, G., Luossavaara-Kilrunavaara Co.
Sala.—Gränstrom, G. A.
Sandviken.—Göransson, K. F.
Stockholm.—Akerman, R., 34 Kungsgatan.
Berg, P. T., 1 Strandvägen.
Brinell, J. A., Jernkontoret.
Hoffman, A. O., Handverkargatan 15.
Lundbohm, H., P. O. Box 236.
Petersson, G. W., Engelbrecktsgatan 43B.
Sjögren, H., Academy of Science.
Striberg.—Larsson, P., Nora Mines.
Svanevik.—Trotz, J. O. E.
Westervik.—Tillberg, E. W.

SWITZERLAND.

Andeer.—Ragaz, I.
Bale.—Timm, J. M., Metzerstrasse 53.
Berne.—Kirkcaldy, N. M., Kirchenfeld.
Bienne.—Sinn, A.
Locarno.—Pedrazzini, J.
Zurich.—Jabs, A., Alpenstrasse 7.
Escher, F., Rigistr. 39, IV.

ASIA.

CHINA.

Canton.—Kong, S. T., Board of Industries & Commerce.
Chiao Tso, Honan.—Shaw, A. J. M., Ja Mei Sen Colliery.
Hong Kong.—Yung, M. B., 5 Arbuthnot Rd.
Lin-Tcheng Sien.—Kwang, K. Y., Lincheng Mines.
Shanghai.—Cole, F. L.
Jui, P. v., Care U. S. Postal Agency.
Silva, L., 89 Broadway.
Tientsin.—Adams, G. I., Pei Yang Univ.
Moller, W. A., Imperial Railways.
Tong Shan.—Woo, Y. T., Chinese Engrg. & Min. Co., Ltd.
Wuchow.—Wang, C. Y., Pao Tai M. & S. Co.

INDIA.

Bangalore.—Smeeth, W. F.
Celebes.—Vaughan, R. F., Menado Residency.
Champion Reefs.—Thomas, H. T.
Coromandel.—Cooke, H. M. A., Balaghat Gold Mining Co.
Kodarma.—Dickson, A. A. C.
Marikuppam.—Pritchard, W. T. M., Mysore Gold Mining Co., Ltd.
Maupuve.—Lakeland, W. J., Burma Mines, Ltd.
Oorgaum.—Paterson, G. A.
Smith, P. B., Tank Mine.
Panuria.—Agabeg, E. C.
Ramandrug, via Hospet.—Sanders, A. D., General Sandur Min. Co.
Rangoon.—Bleeck, A. W. G., Box 441.
Samwell, N., Box 385.
Sakchi.—Laudig, O. O., Tata Iron & Steel Co.
Sahlin, R. C., Tata Iron & Steel Co.
Shivrajpur.—Cairns, J. M., Bamankua Manganese Co.
Umaria.—Freymouth, W. A.

JAPAN.

Akita.—Hioke, M., Akita Mining School.
Kawamura, T., Osaruzawa Mine.
Buzen.—Takagi, K., Mitsui Mining Co.
Chikugo.—Fujioka, J., Mitsui Miike Coal Mines.
Nishimura, K., Miike Mine, Ohmuta.
Dojima.—Fujita, H.
Katsura, Y., Fujita Co.
Fukuota.—Ko, S., Kiushiu Univ.
Hitachi Mine.—Takenouchi, K.
Hyuga.—Kasahara, W., Hibira Copper Mine.
Kagoshima.—Hasegawa, K.
Kamakura.—Sakikawa, M., 1116 Omachi.
Kashiwazaki.—Matsukata, O., Nippon Oil Co.
Naito, H., Nippon Oil Co.
Nagasaki.—Kawai, Y., Sakito Coal Mines.
Naokata.—Kaishima, K., Kaishima Coal Min. Co.
Nikko.—Hasegawa, T., Furukawa Min. Co.
Osaka.—Imaizumi, K., Honjo, 16, Toyosaki-Mura.
Kano, S., Osaka Kazan Kantokusho.
Tsujimoto, K., Care Fujita-gumi, Dojima.
Oyu-Mura.—Kibe, K.
Shidzuoka.—Nishio, K., 7 Konya St.

Shimotsuke. — Kojima, J., Ashio Copper Mines.
Otagawa, M., Ashio Copper Mines.
Shisaka-Shima.—Nakamura, K., Sumitomo's Smelting Wks.
Taipeh.—Fukutome, K., Mining Bureau.
Tokyo.—Adachi, J., 11 Shiba Park.
Dan, T., 1 Suruga-Cho, Nihombashi-Ku.
Furukawa, T., 10 Tsukiji Nichome.
Harada, S., Mitsubishi, Kaisha Marunouchi.
Hasegawa, K., Furukawa Min. Co.
Iioka, M., 25th Nakaroku banche, Kojimachi.
Inouyé, K., Furukawa & Co., Marunouchi.
Inouyé, T., Kyoto Imperial Univ.
Kada, T., 34 Honmura Yotsya.
Kamiyama, T., 71 Haramachi, Ichome, Ushigome.
Kanda, R., 18 Nakatonuzakacho Koishikawaku.
Katsura, B., 58 Sendagi-Machi, Hongo.
Kobuse, J., 43 Toyokawa, Koishikawa-Ku,
Kondo, R., Furukawa Mining Co., Marunouchi.
Makita, T., Mitsui Mining Co.
Murota, Y., Hakkaido Tauko Kisen, Kabushiki Kaisha Tsukiji.
Nagai, K., 11 Hikawa-cho, Akasakaku.
Oshima, R., 121 Yoyogi Toyotamagun.
Sugimoto, I., Imperial Bureau of Mines.
Takeda, K., 31 Obancho Yotsuyaku.
Tsukakoshi, U., Furukawa Mining Co.
Wada, Prof. T., 36 Sanaw-aka. Ichigaya.
Watanabe, W., 34 Hayashi-cho, Hongo.
Yamada, N., 23 Nakaroku banco, Kojimachi-ku.
Yamaguchi, K., 24 Hinokicho Akasakaku.
Yamanuchi, S., Kojimachi-ku.
Yokohama.—Williamson, H. D., Box 331.

KOREA.

Chiksan.—Taylor, A. W., Chiksan Mine.
Doten.—Skerritt, A. W., Kapsan Mine.
Weigall, H. S., Kapsan Mining Concession.
Pukchin.—Welhaven, A., Oriental Cons. Min. Co.
Pyeng Yang.—Collbran, A. H., Seoul Mining Co.
Manning, J. F., Care Dr. J. H. Wells.
Mills, E. W., Care Dr. J. H. Wells.
Songchin.—Martin, J. J., Care Dr. R. Grierson.
Unsan.—Deardorff, A. E., Oriental Cons. Min. Co.
Lower, J. B., Oriental Cons. Min. Co.
Yeng Byen.—Lawrence, W., Ko Sung Mines.
Selbie, C. C., Ko Sung Mines.

SIAM.

Bangkok.—Law, R. B., Siam Forest Co., Ltd.
Singora.—Heal, J. H.

SIBERIA.

Akmolinsk.—Woolmer, H. C. P., Spassky Cop. Co., Ltd.
Karagandy.—Vigeon, E. C., Spassky Copper Mine, Ltd.
Nikolaievsk-on-Amur.—Lanagan, W. H.
Tomsk.—Mostowitsch, W., Imperial Tech. Institute.
Vladivostok. — Bordeaux, A. F. J., Care Bryner, Kousnetzoff & Co.
Smith, R. E., Care C. L. Smith.

TURKEY.

Ok-Dagh-Maden.—Hofecker, C. A.
Smyrna.—Goodwin, R. H., Care C. W. Whittall & Co.

MALAYSIA.

BORNEO.

Bau Kuching, Sarawak.—Young, H. S., Bau Mines of Borneo, Ltd.

JAVA.

Batavia.—Jongh, A. C. de, Hoofdbureau Mijnwezen.

STRAITS SETTLEMENTS.

Ipoh, Perak.—Master, N. M., Care Osborne & Chappel.
Kampar, Perak.—Eu, S. H., Care E. T. Sen.
Kuantan Pahang.—Marriner, J. T., Pahang Consolidated.
Quala Lumpur.—Proust, R.
Rawang, Selangor.—Park, M.
Singapore. — Brown, G. E., 3a Finlayson Green.
Stoutz, E. de.
Tronoh, Perak.—Griffiths, H. D., Tronoh Mines, Ltd.

SUMATRA.

Fort-de-Kock.—Grammel, P., West Sumatra Mijnen Synd.
Lebong Soelit.—Brown, W. S.
Loeboe Sikaping.—Hundeshagen, L.

AFRICA.

CAPE COLONY.

Cape Town.—Park, W., Box 1562.
Pritchard, De V. G., Box 135.
Port Elizabeth.—Berry, J. F., 10 Miller St.

CONGO BELGE.

Elisabethville.—Chennalls, J. A.
Kanwa.—Cornell, R. G., Société Internationale Forestière et Minière du Congo.
Kasindi.—Richards, G. M., Cie. des Chemin de Fer du Congo Superieur aux Grand Lacs Africains.

EGYPT.

Alexandria.—Gripari, G. N. de, 6 rue Cleopatre.
Giza, Cairo.—Home, D. R., Survey Dept.

GOLD COAST COLONY.

Obuasi.—Friedlander, O. A., Ashanti Goldfields Corpn., Ltd.
Secondi.—Foster, D. F., Prestea Block A., Ltd.
Tarkwa.—Blakeslee, F. A., Taquah Min. & Explor. Co., Ltd.
Newbery, J. W., Taquah Min. & Exploration Co., Ltd.
Stuckey, L. C., Taquah Min. & Exploration Co., Ltd.

MADAGASCAR.

Tananarive.—Bourdariat, A. J.

RHODESIA.

Bulawayo.—Currie, W., Willoughby's Consolidated Co., Ltd.
Drake, F., Box 249.
Goodchild, W. H., Box 220.
Griffin, F. R. N., Box 408.
Griffin, H. M., Box 592.
Parker, J. E., Box 213.
Pringle, R. W., The Club.
Whitmore, L. H., 17 Agency Chambers.
Salisbury.—Collings, B. I., Box 270.
Parsons, C. E., Box 94.
Wheler, A. S., Box 48.
Selukwe.—Little, J. B.

SOUTH AFRICA.

Francistown.—Ryan, W. A., Tati Concessions, Ltd.
Kimberley.—Dickinson, H. T., De Beers Cons. Mines, Ltd.
Early, C. H., Kamfersdam Diamond Min. Co.
Nichol, W., Care African Banking Corpn.
Wagner, P. A., De Beers Cons. Mines, Ltd.
Williams, A. F., De Beers Cons. Mines, Ltd.
Piggs Peak.—Hunter, C., Piggs Peak Dev. Co., Ltd.

TRANSVAAL.

Boksburg.—Netter, A. J.
Brakpan.—Hughes, H., Box 49.
Denver.—Judge, A. T., Box 32.
East Rand.—Horst, C. W. H., East Rand Prop. Mines.
Johnson, E. H., Box 134.
Germiston.—Thomas, J. E., Box 178.
Johannesburg.—Allen, R., Box 975.
Andrew, T., Rand Club.
Atkin, A. J. R., Box 6231.
Atkinson, R. C., Box 149.
Austin, K., Box 4305.
Bevington, R. G., Box 1091.
Bosqui, F. L., H. Eckstein & Co.
Brett, A. J., Box 102.
Britten, T. J., Box 494.
Caldecott, W. A., Box 1167.
Calderwood, J. M., Box 2295.
Cameron, W. McC., Box 1156.
Carter, P., Box 1024.
Cohen, E. H. A., Rand Club.
Frames, M. E., Box 8.
Grey, G. R., 54 Ameshoff St.
Honnold, W. L., Corner House.
Kenney, H. S., Box 3541.
King, O., Rand Club.
Knecht, C. E., Box 2269.
Lea, J., Box 1392.
Orr, J., Box 1176.
Osborn, P. B., Box 1242.
Rogers, C. E., Box 1065.
Stockett, A. W., Box 5393.
Symons, A., Box 469.
Temby, W. T., Box 98.
Thomson, S. C., Box 485.
Tom, I., Box 2567.
Townsend, H. P., Box 1064.
Warriner, R. C., Box 102.
Wartenweiler, F., Box 2476.
Way, E. J., Box 2927.
Knights.—Lewis, F. B., Box 1.
Knights Deep.—Dowling, W. R., Box 143.
Krugersdorp.—Bottomley, H.
Davis, C. R., Lancaster G. M. Co., Ltd.
Langlaagte.—Hebbard, A., Box 98.
Maraisburg.—McEwen, A. F., Box 65.
Nigel.—Parry, C. F., Box 50.
Pilgrims Rest.—Neale, A. L., Transvaal Gold Min. Estates, Ltd.
Randfontein.—Maxwell, F. A. G., Randfontein Estates G. M. Co.
Springs.—Bushnell, B.D., Springs Mines, Ltd.
Womble, L. A., Box 41.

WEST AFRICA.

Naragata.—Cousin, R., Gurum River Tin Mines, Ltd.
Waugh, P. B., Birichi Tin Co., Ltd.
Winmill, H., Northern Nigeria (Bauchi) Tin Mines, Ltd.

AUSTRALASIA.

NEW SOUTH WALES.

Adaminaby.—Dunstan, A. J., Hyloe Copper Mines.
Ashfield.—Stephen, A. E., Webbs Ave.
Broken Hill.—Cunningham, J. C., Broken Hill South Silver Mining Co.
Delprat, G. D., Broken Hill Prop. Co., Ltd.
Hebbard, J., Sulphide Corpn.
Henderson, E. T., Broken Hill Prop. Co.
Broken Hill.—Continued.
Horwood, E. J., Broken Hill Prop. Co.
Lindsay, J. A. M., Broken Hill Prop. Co.
Palmer, T. H., B. H. Junc. N. Silver Min. Co.
Wainwright, W. E., B. H. So. Silver Min. Co.
Ward, O. D., Broken Hill Prop. Co.
Weir, G., B. H. Silver Min. Co.
Bermagui.—Warn, J. E.
Boppy Mountain.—Moore, R. McI., Mt. Boppy G. M. Co., Ltd.
Negus, J., Mt. Boppy Gold Mine.
Williamson, W. D., Boppy Mt. G. M. Co., Ltd.
Burraga—Armstrong, J. O., Lloyd Copper Co.
Cobar.—Bellinger, H. C., Gt. Cobar, Ltd.
Blakemore, G. H., Gt. Cobar, Ltd.
Groom, T. C., Great Cobar, Ltd.
Murphy, F. J., Great Cobar, Ltd.
Polkinghorne, J., Box 58.
Cockle Creek.—Morse, P. S., Sulphide Corp., Ltd.
Duntroon.—Gilchrist, A. D., Royal Military College.
Orange.—Marriott, F. A., "Roslyn," Summer St.
Port Kembla.—Goode, E. N.
White, E. A.
Sydney.—Freeman, A. W., Challis House.
Gould, H. J., 10 Castlereagh St.
Longworth, W., Ocean House, Moore St.
Mingaye, J. C. H., Dept. of Mines.
More, G. A., "Altona," Berry St.
Paul, F. P., "Danmark."
Power, F. D., National Mutual Chambers.
Robertson, J. L., 7 Lennon St., Mosman.
Robertson, J. R. M., 38 Pitt St.
Savage, A. E., Castlereagh House.
Smith, G., Dept. of Mines.
Somerset, H. St. J., Jr., Hunter's Hill.
Taylor, J., "Betys," Montague Rd., Neutral Bay.
Wilson, J. B., 82 Pitt St.
Tent Hill, via Deep Water.—Reid, J. H., Glen Smelting Co.
Waratah.—Schröder, H., English & Australian Copper Co., Ltd.
Woolwich.—Mackenzie, G. S., Sydney Tin Smelting Co.

NEW ZEALAND.

Auckland.—Gordon, H. A., Ranfurly Rd., Epson.
Rich, F. A., Phœnix Chambers.
Rhodes, C., New Zealand Mines Trust, Ltd.
Rhodes, F. N., New Zealand Mines Trust Bldg.
Danganin.—Shaw, J. B., 41 Wicksteed St.
Dunedin.—Beal, L. O.
Karangohake, Auckland.—Stansfield, H., Talisman Con., Ltd.
Lawrence, via Otago.—Jackson, J. H., Blue Spur Cons. Gold Co., Ltd.
Waihi.—Banks, E. G., Box 28.
Grace, W. F., Waihi Grand Jc. Gold Co., Ltd.
Jarman, A., Waihi Grand Jc. Gold Co., Ltd.
Williams, R. E., Waihi Mine.

QUEENSLAND.

Brisbane.—Kingsbury, H. C., Care J. J. Kingsbury, Supreme Court.
Maxwell, W., 10 Kent Bldgs.
Cairns.—Valentine, C. F., Emuford.
Chillagoe.—Horsburgh, J., Chillagoe Co., Ltd.
Mainwaring, H. M. C., Chillagoe Railway & Mines, Ltd.
Cloncurry.—Corbould, W. H., Mount Elliott Mine.
Leese, N., Queensland Exploration Co., Ltd.
Forsayth.—Wentworth, D'A., Hampden Copper Mine.
Irvinebank.—Moffat, J., Irvinebank Min. Co.
Raleigh, J. R., Irvinebank Min. Co.
Lancelot.—Pearce, W. C. W., Hadleigh Castle Mine.
Many Peaks.—Westcott, L. A., Many Peaks Mine.

Mareeba.—Gipps. F. G. de V.
Mount Chalmers.—Moule, J. W., Great Fitzroy Mine.
Mount Morgan.—Boyd, A. A., Mt. Morgan G. M. Co., Ltd.
Humphreys, C. H.
Patterson, B. G.
Richard, G. A., Mt. Morgan G. M. Co., Ltd.
White, N. F.
Mungana.—Vivian, J. C., Mammoth & Macdonald Mines, Ltd.
Ravenswood.—Caldwell, W. A., New Ravenswood Mining Co.
Silver Spur.—Hall, E., Silver Spur Min. Co.

SOUTH AUSTRALIA.

Adelaide.—Avery, J., Magill.
Ayers, F. G., 16 Weymouth St.
Gartrell, H. W., The University.
Hawker, E. W., Adelaide Club.
Leabrook.—Brown, A., Godfrey Terrace.
Malvern.—Eustice, R., Austral Terrace.
Moonta.—Aplin, W., School of Mines.
Hayes, W. H., Moonta Mines.
Trenerry, E. J., Moonta Mines.
Port Pirie.—Jobson, J., Broken Hill Prop. Co.
Poage. J. G., Broken Hill Prop. Co.
Prospect.—Opie, N., "Marrabinga," Azalea St.
Wallaroo.—Brown, A. L., Bagot St.
Dawbarn, G. J.
Hancock, H. L., Wallaroo & Moonta M. & S. Co., Ltd.
Pryor, J., Wallaroo Mines.
Slee, W. E., Bagot St.

TASMANIA.

Beaconsfield.—Heathcote, C. F., Tasmania G. M. Co., Ltd.
Derby.—Clark, L. C., Briseis Mines, Ltd.
Hobart.—Kennedy, J., New Wharf.
Launceston.—King, E. M., Leura.
Simson, A.
Thompson, L. G.
Moonah.—Williams, L., Claremont.
North Lyell.—Coote, C. E., Lyell Comstock Copper Co.
Queenstown.—Dean, A. L., Mt. Lyell M. & Ry. Co., Ltd.
Sticht, R. C., Mt. Lyell Min. & Ry. Co., Ltd.
Wesley, W. H., Jr., Mt. Lyell Min. & Ry. Co.
Rosebery.—Barker, G.
South Burnie.—Sale, W. R.
Waratah.—Millen, J. D., Mt. Bischoff Mine.
Zeehan.—Briggs, W. A. J., Renison Tin Mine.
Harris, H., Tasmanian Smelting Co.

VICTORIA.

Ballarat.—Poole, W., School of Mines.
Melbourne.—Brown, A. T., 31 Queen St.
Courtney, C. F., 34 Queen St.
Dickenson, F. M., Equitable Bldg.
Dyson, T. I., 57 Swanston St.
Fawcett, J. H., 31 Queen St.
Gilchrist, A. D., School of Mines.
Godfrey, J. R., Chancery Lane.
Greenway, T. J., 369 Collins St.
Hargraves, E. P., 31 Queen St.
Hartwick, J. S., 3 Murray St., Elsternwick.
Higgins, J. M., 39 Queen St.
Hooker, B., Carrick Hill, Canterbury.
Kayser, H. W. F., "Willerden," E. St. Kilda.
Klug, G. C., Bewick, Moreing & Co.
Lempriere, O. T., 506 Little Collins St.
Lewis, J. B., 31 Queen St.
McLeod, A. G., 356 Danks St., Middle Pk.
Macgeorge, A. J., 99 Queen St.
Nicholas, A. M., 31 Queen St.
Noyes, H., 17 Queen St.
Schlapp, H. H., 163 William St.
Wilson, H., 31 Queen St.
St. Kilda.—Herman, H., "Rilsa," Glen Eira Rd.
Kozminsky, L. M., 6 Burnett St.
MacKay, P. A., "Illinois," Winnuera Pl.
Walhalla.—Miller, J., Long Tunnel Min. Co.

WESTERN AUSTRALIA.

Boulder.—Aarons, J. B., Chaffers G. M. Co.
Fraser, A., Great Boulder Mine.
Hamilton, R., Gt. Boulder Prop. Mines, Ltd.
Nicolson, R. B., Ivanhoe Gold Corpn., Ltd.
Sutherland, J. W., Golden Horseshoe Est. Co., Ltd.
Fimiston.—Black, R.S., Kalgurli Gold Mines, Ltd.
Cleland, E. D., Gt. B. Perseverance Gold Mine.
McAulay, D. F., Box 94.
Vail, H. E., Box 88.
Kalgoorlie.—Moore, B. H., School of Mines.
Roberts, G. M., Associated Northern Blocks.
Varden, R. A., Gt. Perseverance Gold Mine.
Meekatharra.—Turner, W. J., Ingliston Extended G. M., Ltd.
Menzies.—Greenard, W. F.
Muralgarra Sta., via Yalgoo.—Wittenoom, C. H.
Perth.—Montgomery, A., Dept. of Mines.
Shallcross, V. F., 65 St. Georges Ter.
Watkins, A. O., Royal Mint.
Whitfeld, H. E., Univ. Western Australia.
Whim Creek.—Sleeman, H. R., Whim Will Copper Mines, Ltd.

INSTRUCTED TO HOLD ALL MAIL.

Blood, George D.
Civretto, Hyacinthus P.
Collins, W. J.
Cormack, Robert R.
Eissler, Emanuel.
Fitzsimmons, Francis J.
Frank, Albert.
Gregson, William H.
Hudson, Albert W.
Jones, Owen.
Kehler, Charles R.
Leer, I. Wayne von.
Macnutt, Charles H.
Mather, Henry A.
Mentzel, Charles.
Pearson, William R.
Reece, Frederick B.
Saxman, Charles W.
Shutts, Arthur B.
Tse, Tsok K.
Yates, James.

ADDRESS WANTED.

Armstrong, Richard E.
Baxter, Francis K., Jr.
Boyd, J. Francis.
David, W. M.
Deike, George H.
Ederheimer, Leopold.
Eggers, John H., Jr.
Ferguson, Donald.
Ferguson, Hugh B.
Heywood, William A.
Hollis, R. W.
Horschitz, Richard J.
Jackson, Walter H.
Johnson, Dion L.
Kow, Tong S.
Lampshire, John O.
Malins, Francis A.
Moore, Roy W.
Peterson, Frank.
Rathborne, Merwyn R. W.
Reynolds, Llewellyn.
Rickard, Harold.
Russell, Branch E.
Sanders, W. E.
Sethna, Nanabhoy R.
Stoddart, A. W.
Upham, W. E.
Van Ness, William W.
Vinicombe, Robert E. B.
Watson, Ralph W.
Webster, Erastus H.
Wilson, Elwood J.

DECEASED.

Elected.		Died.
1895	*Abbott, Ai Arthur	1908
1882	*Abbott, Arthur V.	1906
1905	*Abe, Masayoshi	1909
1903	*Adams, Charles C.	1905
1905	*Adams, William	1909
1903	*Adams, W. Edward	1910
1884	*Addy, Matthew	1896
1906	*Affleck, William	1911
1889	*Akers, William A.	1906
1905	*Alabaster, Rupert C.	1911
1899	*Alberger, Louis R.	1911
1894	*Allen, R. B.	1896
1905	*Allen, R. Scott	1906
1874	*Amiot, H.	1892
1886	*Amsler, Carl	1894
1898	**Anderson, John W.	1905
1895	*Ångström, Carl	1901
1887	*Archbald, James	1910
1900	*Arlett, George H.	1906
1890	*Armstrong, John F.	1898
1882	*Arnolds, Hugo	1886
1875	*Ashburner, Charles A.	1889
1872	*Ashburner, William	1887
1883	*Atkins, C. M., Jr.	1885
1875	**Attwood, George	1912
1905	*Austen, Peter T.	1907
1883	**Austin, T. S.	1906
1897	*Ayers, William	1898
1885	*Babcock, Geo. H.	1893
1892	*Bachman, David I.	1912
1884	*Bailey, Edward	1889
1880	*Bailey, Jackson	1887
1887	*Baker, Thomas T.	1906
1900	*Ballou, Franklin	1903
1903	*Bamberger, Sidney M.	1911
1901	†Barber, William B.	1905
1886	*Barnes, F. W.	1892
1884	†Barns, George T.	1900
1884	*Barr, J. N.	1904
1888	*Barrett, D. H.	1888
1877	*Bartlett, J. C.	1903
1890	*Bartlett, John H.	1910
1902	*Batchelor, William T.	1906
1901	*Batterman, C. S.	1901
1897	**Beals, William, Jr.	1908
1891	*Becher, H. M.	1893
1882	*Beeger, H.	1892
1888	*Bell, George A.	1902
1892	*Bell, G. B.	1893
1897	**Bell, Chas. Lowthian	1906
1874	**Bell, Sir Lowthian**	1904
1890	*Bennet, T. A.	1905
1889	*Bennett, David A.	1897
1892	*Bensusan, E. V.	1906
1897	*Benton, Charles W.	1907
1899	*Best, John W.	1904
1881	*Biddle, William F.	1910
1875	*Bierwith, L. C.	1902

Elected.		Died.
1886	*Bildt, Carl W.	1907
1882	*Billing, G	1890
1897	*Bird, Arthur H. S.	1911
1875	*Blackwell, Edward	1880
1877	*Blake, F. C.	1891
1871	*Blake, William P.	1910
1903	*Blandy, A. Poyntz	1903
1871	*Blandy, John F.	1903
1897	*Blatchford, John	1906
1871	*Blossom, T. M.	1876
1888	*Blue, John	1907
1884	*Boehmer, Max	1913
1893	**Boericke, Rudolph	1897
1882	*Boggs, William R., Jr.	1907
1887	*Boies, Henry M.	1903
1906	*Bond, Louis W.	1908
1892	*Booth, Edgar H.	1898
1875	*Borda, E.	1897
1891	*Bosher, C. H.	1894
1871	*Bowden, James H.	1900
1886	*Bowman, Amos	1894
1886	*Boyle, Thomas G.	1890
1887	*Braden, S.	1894
1902	*Bradford, Wager	1909
1874	*Bradley, George L.	1906
1879	*Brainerd, A. F.	1893
1871	*Bramwell, J. H.	1894
1896	*Breisch, E. E.	1906
1879	*Bridgman, H. L.	1900
1881	*Briggs, Robert	1882
1901	*Briggs, Roswell E.	1911
1908	*Brill, Paul K.	1911
1880	*Brinsmade, J. B.	1884
1887	*Brock, Arthur	1909
1906	**Brooks, Robert S.	1909
1880	*Brown, A. C.	1890
1875	*Brown, Alexander E.	1911
1872	*Brown, A. J.	1875
1881	*Brown, Edward L.	1908
1875	†Brown, Fayette	1910
1895	*Brown, Horace F.	1906
1905	*Brown, James W.	1909
1895	*Brown, Raymond B.	1909
1886	*Brown, T. Forster	1907
1890	**Browne, Arthur R.	1900
1882	*Browning, F. D.	1885
1885	*Brückner, Wm.	1887
1890	†Brunings, J. H.	1893
1901	*Bryan, Luke W.	1905
1896	*Bucke, M. A.	1899
1902	**Buckley, Ernest R.	1912
1900	†Buell, P. A.	1900
1882	*Bulkley, Fred G.	1908
1879	*Bulkley, Henry W.	1911
1874	*Bullock, M. C.	1899
1876	*Bunsen, Robert	1887
1876	*Burden, James A.	1906
1882	*Burlingame, E. E.	1907

Elected.		Died.
1900	*Burrell, Henry	1910
1896	*Butler, Chauncey E.	1907
1872	†Butler, Cyrus	1890
1900	*Butler, W. P.	1903
1893	*Button, Edward	1900
1886	*Byers, Alexander M.	1900
1903	*Cade, Edwin Arthur	1903
1876	*Caldwell, W. B., Jr.	1880
1901	*Calero, José	1910
1878	*Cameron, James R.	1881
1899	*Campbell, Frank J.	1910
1897	**Campbell, William Y.	1899
1876	†Canfield, A. Cass	1904
1893	*Carkeek, John	1900
1878	*Carnegie, Thomas M.	1886
1887	*Carpenter, Frank R.	1910
1891	*Carpenter, J. H.	1898
1897	†Carrel, F. J.	1894
1887	*Carroll, Michael	1891
1901	*Carroll, William E.	1904
1893	*Cary, John S.	1899
1903	**Carter, T. Lane	1912
1878	*Case, W. H.	1898
1892	**Castillo, A. del**	1895
1873	*Chalfant, John W.	1898
1895	**Chalmers, John A.	1912
1886	*Chambers, R. C.	1901
1882	*Chanute, Arthur	1895
1879	*Chanute, Octave	1910
1879	*Chaper, Maurice	1896
1882	*Cheever, B. W.	1888
1871	*Chester, A. H.	1903
1890	*Chester, Edward D.	1907
1875	*Chisholm, Henry	1881
1900	*Chisholm, John	1912
1897	†Chisholm, S. S.	1901
1876	*Chouteau, Pierre	1911
1897	†Church, Myron J.	1912
1890	*Clark, C. J.	1896
1874	*Clark, Ellis	1895
1877	*Clark, Henry G.	1881
1887	*Clark, Joseph K.	1903
1872	*Clark, R. Neilson	1894
1881	*Clark, William	1884
1886	*Claudet, Arthur C.	1913
1874	*Clayton, Joshua	1889
1883	*Clayton, W. S.	1886
1887	**Clement, Victor M.	1903
1876	*Clemes, J. P.	1876
1880	**Cliff, John	1912
1906	*Climo, William T.	1908
1890	*Codington, Edmund W.	1910
1891	*Coghlan, F. M.	1903
1887	*Colbath, Lemuel U.	1908
1896	*Cole, Harold M.	1902
1903	*Coleman, R. Prewitt	1910
1882	†Collingwood, Francis	1911
1895	*Collins, Arthur L.	1902
1876	†Collins, H. E.	1896
1881	*Conant, T. P.	1891
1900	*Conner, John T.	1908
1888	*Conro, Albert	1901
1902	**Contreras, Manuel M.**	1902
1882	*Converse, James B.	1883
1891	*Conyngham, C. M	1894
1874	*Cook, George H.	1886
1902	*Coom, Henry	1903
1874	*Cooper, Edward	1905
1899	†Corbett, Francis E.	1901
1871	*Coryell, Martin	1892
1883	*Coryell, Torbert	1912
1903	*Cosby, Robert P.	1910
1891	*Cowland, C. D.	1894
1886	*Cowles, E. H.	1892
1901	†Cox, Sterling B.	1908
1880	†Coxe, Alexander B.	1906
1871	*Coxe, Eckley B.	1895
1874	*Coxe, W. E. C.	1904
1871	*Crafts, Walter	1896
1887	*Craven, Frank S.	1889
1887	*Craven, Henry S.	1889
1879	*Crocker, George A.	1906
1879	*Crocker, William B.	1885
1906	*Culbert, Milton T.	1911
1879	*Curry, Henry M.	1900
1871	*Daddow, S. H.	1875
1884	*Dagron, J. G.	1895
1872	**D'Aligny, H. F. Q.	1875
1883	*Darley, E. C.	1901
1891	†Darling, J. V.	1892
1891	*Darling, W. P.	1896
1887	**Daubrée, A.**	1896
1905	*Daugherty, Edwin S.	1905
1877	*Davenport, Russell W.	1904
1891	**Davey, George	1908
1900	*Davidow, Isidor	1904
1882	*Davidson, D. R.	1884
1899	†Davidson, Louis	1903
1881	*Davies, Edw. S.	1885
1887	*Davies, W. B.	1891
1886	†Davis, M. C.	1886
1884	†Dayton, L. M.	1892
1883	*De Camp, A. H.	1895
1885	*De Camp, Edw. F.	1895
1875	*De Camp, William S.	1905
1872	**De Crano, E. G.	1893
1880	*De Peiger, R. F. J.	1883
1881	*Desloge, John M.	1900
1903	*Devinny, George V.	1907
1902	*Dickerson, Clarence M.	1903
1883	*Dickson, Thomas	1884
1897	*Diggles, James A.	1910
1902	*Dillon, Ralph	1902
1884	*Disston, Horace C.	1902
1886	*Disston, Thomas S.	1895
1902	*Dobler, F. C.	1903
1884	*Dodge, Wallace H.	1895
1900	**Dodge, William E.	1903
1881	*Dods, John C.	1911
1892	*Dodson, R. T.	1896
1897	*Doerr, Edward	1904
1882	*Dominick, F. J.	1895
1879	*Dorsey, E. B.	1900
1887	**Dougherty, Clarence E.	1912
1879	*Doyle, Pat	1907
1907	*Drake, Francis V.	1909
1875	†Dresser, Charles A.	1873
1871	**Drown, Thomas M.**	1904

Elected.		Died.
1900	*Du Bois, Louis C.	1903
1878	**Dudley, Charles B.	1909
1889	*Duffield, P. W.	1897
1876	*Durfee, W. F.	1899
1881	*Dwight, W. S.	1884
1888	*Eames, Richard, Jr.	1909
1907	*Eatherly, Adrian D.	1912
1871	*Egleston, Thomas	1900
1902	*Ekman, Adolf	1907
1889	*Eldridge, George H.	1905
1879	†Ely, E. B.	1884
1891	*Ely, George H.	1894
1881	*Emanuel, W. H.	1901
1876	*Emerson, B. F.	1884
1880	*Emery, Charles E.	1898
1877	**Emmons, Samuel F.	1911
1903	*Emrich, Horace H.	1911
1872	*Engelmann, Henry	1899
1893	†Escobar, Mario	1901
1898	*Evans, George H.	1907
1880	*Evans, John D.	1891
1887	*Eveleth, J. K.	1907
1890	*Farrel, Franklin	1912
1883	*Fegely, Isaac	1891
1881	*Felton, S. M.	1884
1878	*Ferguson, E. M.	1904
1876	*Fernekes, Anton	1887
1886	*Ferris, G. W. G., Jr.	1896
1891	*Ferry, Charles H.	1910
1886	*Fiero, A. W.	1906
1872	*Firmstone, William	1875
1876	*Fisher, Harvey	1889
1880	*Fisher, H. H.	1888
1897	*Fleming, John B.	1911
1875	*Foote, Herbert C.	1880
1882	*Ford, Robert G.	1891
1902	**Forrester, Robert	1910
1896	*Forsythe, Robert J.	1908
1903	*Foster, Clement Le Neve	1904
1888	*Francis, A. G.	1890
1880	*Francis, George G.	1907
1904	**Fraser, John H.	1906
1871	**Frazer, Persifor	1909
1871	*Frazier, B. W.	1905
1885	*Freeland, Francis T.	1908
1878	*Freeman, H. C.	1900
1877	†Freeman, William C.	1903
1894	*French, Aaron	1902
1879	*Fricke, F. G.	1905
1872	*Fritz, John	1913
1904	*Fuller, Edward L.	1909
1894	*Fuller, James W.	1910
1877	†Fuller, John T.	1885
1898	*Fuller, T. E.	1898
1891	*Fulton, G. E.	1895
1888	*Furlonge, W. H.	1896
1880	*Furman, H. Van F.	1902
1879	*Fusz, Paul A.	1910
1890	**Gaetzschmann, Moritz**	1895
1900	*Gallagher, James B.	1908
1878	*Gardner, G. Clinton	1904
1898	*Garretson, Oliver S.	1908
1881	*Garrett, William	1903
1893	*Garrett, William W.	1907

Elected.		Died.
1884	†Gatewood, R.	1890
1892	*Gibson, Robert	1906
1894	*Gibson, W. K.	1898
1883	*Gilbert, Edward G.	1893
1881	*Glenn, William	1907
1882	*Goetz, G. W.	1897
1897	*Goodwillie, J. B.	1898
1871	†Goodwin, H. S.	1892
1876	*Gould, Robert A.	1878
1872	†Gowen, Franklin B.	1889
1890	*Gracey, F. P.	1895
1875	†Graham, Thomas	1892
1889	*Grant, James B.	1911
1896	*Grant, John A.	1897
1898	*Grave, Percy	1911
1908	*Grice, John M.	1909
1877	*Gridley, Edward	1887
1874	*Griffen, John	1884
1896	*Grillo, Julius	1911
1887	*Grubb, Charles B.	1911
1894	*Grubb, E. B.	1899
1871	**Gruner, L.**	1883
1889	*Gue, T. R.	1907
1898	*Guenther, Albert	1899
1897	*Guinn, John B.	1905
1883	*Gurley, William	1887
1883	*Hadley, W. C.	1896
1903	**Hague, James D.	1908
1879	*Hahn, Ignatius	1888
1888	*Hainsworth, William	1896
1891	*Halder, Albert H.	1901
1891	*Hall, Harry R.	1911
1881	*Hall, James F.	1884
1888	*Hall, Jesse	1902
1894	*Hamilton, Walker	1895
1889	*Hammer, Hakon	1896
1887	*Hanna, George B.	1906
1896	*Hanson, Rasmus	1909
1895	*Harlow, Mellen S.	1901
1900	*Harmon, Dana	1903
1874	*Harnickell, A.	1887
1877	*Harrington, B. F.	1907
1907	*Harris, Edwin F.	1912
1897	*Harris, Frederick S.	1908
1872	*Harris, Stephen	1874
1871	*Harris, Wm. J.	1904
1900	*Hart, R. G.	1906
1877	†Hart, W. R.	1892
1890	*Hartung, Max J.	1894
1892	*Hartzell, H. K.	1911
1903	*Harvey, Harold H.	1909
1880	†Harvey, William H.	1888
1894	*Hayden, Edward S.	1899
1887	†Hazard, Rowland	1898
1881	*Healy, Maurice	1881
1883	*Heard, John, Jr.	1895
1874	*Hearne, Frank J.	1907
1904	*Heberlein, Max	1908
1902	*Heckelmann, Otto	1902
1893	*Heckscher, Richard P.	1903
1881	*Hegeler, Edward C.	1910
1873	*Heinrich, Oswald J.	1886
1889	*Helms, Albert	1907
1875	*Hemphill, James	1900

Elected.		Died.
1900	*Henne, Christopher	1906
1888	*Hennin, Alphonse	1908
1886	*Henning, Gus. C	1910
1892	*Henry, Adolph	1892
1890	*Hesse, Conrad E	1910
1883	*Hewett, George C	1907
1871	*Hewitt, Abram S	1903
1890	*Hicks, Geo. J	1891
1894	*Hildreth, R. W	1895
1888	**Hillard, Charles J	1907
1889	*Hillman, Daniel	1890
1891	*Hinton, F	1895
1880	*Hoatson, Thomas	1897
1892	*Hobson, John B	1912
1884	*Hodges, A. D., Jr	1910
1882	*Hodgson, Thomas	1896
1888	**Hoefer, Eugene	1899
1876	*Hoffman, John W	1910
1890	*Hofius, W. D	1912
1884	*Hofmann, Ottokar	1909
1875	*Holbrook, F. N	1902
1887	†Holden, E. F	1899
1899	*Holdsworth, Frank A.	1902
1871	*Holley, A. L	1882
1887	*Hollister, O. J	1892
1875	*Holloway, J. F	1896
1903	*Holmes, Edwin M	1911
1878	*Hooper, William	1902
1890	*Hopke, Frank E	1890
1908	*Horswill, Frederick A.	1912
1877	*Horton, N. W	1886
1899	*Hosie, James P	1898
1891	*Hosking, George F	1895
1894	*Hoskold, H. D	1904
1898	*Howard, Karl	1907
1886	*Howard, T	1896
1886	†Howe, Epenetus	1911
1895	†Hughes, Charles J., Jr	1911
1886	*Huhn, E. C. O	1894
1881	*Hulbert, Thomas H	1889
1872	*Humphreys, A. W	1894
1882	*Hungerford, Wm. S	1904
1883	*Hunicke, H. August	1909
1879	*Hunt, Alfred E	1899
1891	**Hunt, Charles W	1911
1871	*Hunt, Joseph	1897
1878	*Hunt, Joshua	1886
1871	*Hunt, Thomas	1872
1871	*Hunt, T. Sterry	1892
1899	†Hurley, Thomas J	1907
1879	*Hussey, C. C	1884
1880	*Hyndman, E. K	1884
1879	*Ingersoll, S. Warren	1884
1894	**Ingram, H. E	1907
1876	*Inman, A. L	1894
1890	*Ireland, Thomas A	1902
1900	*Irish, Dana C	1905
1906	*Irvin, Thomas A	1910
1872	*Irving, R. D	1888
1881	†Irwin, John H	1890
1894	*Jackson, T. Moore	1912
1882	*James, Isaac E	1887
1879	*James, Reese	1899
1895	*Jamieson, M. B	1895

Elected.		Died.
1885	*Janin, Alexis	1897
1872	**Janin, Henry	1911
1874	*Janney, Morris P	1898
1901	*Jenkins, Thomas	1902
1874	*Jenney, F. B	1876
1873	*Jernegan, J. L	1881
1892	*Jessop, William H	1900
1898	*Jessup, Alfred E	1907
1904	*Johns, Thomas E	1907
1889	*Johnson, Guy R	1910
1879	*Johnson, Isaac G	1902
1880	*Johnson, Joseph E	1911
1902	*Johnson, Ralph I	1908
1898	†Johnson, William E	1901
1899	*Johnston, Algernon K.	1909
1901	†Johnston, W. J	1907
1881	*Johnston, W. N	1886
1899	*Jolly, Alexander W	1906
1878	*Jones, B. F	1903
1875	*Jones, D. N	1889
1887	*Jones, Edward	1892
1881	*Jones, Griffith	1888
1888	*Jones, James F	1907
1881	**Jones, Washington	1911
1875	*Jones, W. R	1889
1888	*Jousselin, A. L	1897
1906	*Kane, Daniel B	1912
1876	*Keeley, Jerome	1909
1900	*Keener, George L	1906
1872	*Kent, Joseph C	1912
1888	*Kelly, G. D	1892
1890	**Kerl, Bruno**	1905
1876	*Kerr, Prof. W. C	1885
1872	*Keyes, Winfield S	1906
1882	*Kimball, Hiram	1899
1907	Kimber, Alfred	1910
1899	**King, Clarence	1901
1897	†King, Porter	1901
1882	*King, Thomas M	1911
1906	*King, Tom Cobb	1908
1882	*Kingsley, J. Cook	1899
1909	*Kirk, Harry E	1912
1890	*Knight, Fletcher H	1903
1900	*Knight, Wilbur C	1903
1897	*Koch, E. C	1898
1891	*Koehler, Walter J	1901
1874	*Koenig, George A	1913
1895	*Kornberg, G. A	1901
1891	*Krabler, Emil	1909
1891	*Kreischer, C. G	1891
1884	*Kriete, Henry C	1890
1890	*Kurimoto, Ren	1892
1893	*Kurtz, Henry M	1911
1896	*Labram, George	1900
1876	*Lamborn, R. H	1894
1882	**Landis, Edward K	1904
1883	*Landsburg, E	1888
1893	*Lanning, John G	1906
1887	**Larnach, W. J. M	1898
1883	*Lathrop, William A	1912
1878	*Laureau, L. G	1909
1892	*Lavaleye, E. de	1892
1893	*Lawrence, H. L	1911
1895	**Le Conte, Joseph**	1901

Elected.		Died.
1899	†Lee, Harry H.	1905
1876	*Lee, R. H.	1895
1876	*Lee, R. H.	1892
1890	*Lee, J. Henry	1911
1871	†Lee, Washington	1872
1891	*Lehman, Gustavus W.	1906
1882	*Leisenring, E. B.	1894
1875	*Leisenring, John	1874
1891	*Leisenring, Walter	1907
1902	*Lengemann, Aug	1904
1882	*Lennig, Nicholas	1906
1896	**Lesley, J. P.**	1903
1881	*Lewis, David B.	1887
1875	*Lewis, James F.	1901
1871	*Liebenau, Charles von	1875
1887	*Lienau, D. B.	1890
1905	*Light, Herbert H.	1909
1896	*Linderman, Robert P.	1902
1900	*Lindsay, Edward N.	1900
1902	*Lindsay, William A.	1905
1889	*Lindsay, William W.	1902
1905	*Livingston, Clermont	1907
1891	*Loane, W. E	1896
1891	*Lobdell, Geo. G.	1894
1873	*Loiseau, E. F.	1886
1882	*Long, William H.	1906
1871	†Lord, John C.	1872
1875	*Lord, N. W.	1911
1882	*Lord, R. F.	1899
1874	*Lorenz, W.	1884
1881	*Lorenz, W., Jr.	1881
1879	*Lowe, Francis A.	1883
1894	*Luckraft, J. S.	1903
1903	*Lucy, Frank A.	1909
1884	*Lukens, Jawood	1908
1884	*Luther, R. C.	1905
1888	*McCalley, Henry	1904
1903	*McCan, E. K.	1910
1879	*McCandless, E. V.	1903
1897	*McCartney, Robert J.	1904
1871	*McClellan, Arthur	1904
1898	*McClurg, James A.	1910
1906	*McComb, Hoyt S.	1907
1903	*McConnell, John	1906
1874	*McCormack, Henry	1900
1889	*McCrery, Charles	1912
1897	*McCurdy, John E.	1908
1885	*McGinnis, J. W.	1891
1877	*McIntire, Henry M.	1880
1880	†McKee, David	1884
1883	*McKeown, S. W.	1898
1904	*McLaughlin, Harold M.	1912
1906	*McLaughlin, Wm. L.	1911
1899	*McLean, Gordon	1905
1871	*McNair, Thos. S.	1902
1902	*McNamara, Herbert H	1905
1876	*Mackintosh, J. B.	1891
1881	†Mackintosh, W. S.	1884
1898	†MacLaren, Duncan	1901
1886	*MacLean, F. P.	1891
1874	*MacMartin, Archibald	1881
1893	*MacNaughton, James	1905
1876	*Macy, Arthur	1891
1894	†Macy, Charles A., 2d	1901

Elected.		Died.
1874	*Maffet, W. R.	1891
1905	*Maffett, Robert R.	1912
1888	*Mahony, Arthur S. J.	1904
1905	*Mandell, Frank C.	1906
1887	*Manness, Charles F.	1887
1878	*Manthey, William	1883
1890	**Manzavino, N.	1899
1880	*March, W. J.	1891
1887	*Marsh, Charles W.	1896
1888	*Marsh, Walter	1897
1881	**Martin, Edward P.	1910
1879	*Martine, Charles A.	1900
1878	*Marvin, Selden E.	1899
1897	*Matcham, Charles A.	1911
1904	*Mathews, Frederick W	1907
1881	*Mattes, Charles C.	1909
1887	*Matthews, C. W.	1891
1874	*Maury, M. F.	1886
1871	*Maynard, George W.	1913
1882	†Means, Archibald	1898
1877	*Meister, Herman C.	1911
1899	*Mellors, Paul	1902
1871	*Mercur, Frederick	1888
1900	*Mercur, Robert S.	1907
1900	*Messer, Edgar H.	1902
1891	**Metcalf, Alfred T.	1910
1875	*Metcalf, William	1909
1886	*Meyer, A. R.	1905
1882	*Michaelis, O. E.	1890
1875	*Mickley, J. W.	1880
1898	*Middleton, W. B.	1899
1877	*Miles, Fred P.	1897
1893	*Miller, C. H.	1896
1895	*Miller, Edmund H.	1906
1875	*Miller, Reuben	1890
1904	*Miller, Stephen C.	1908
1877	*Mills, James E.	1901
1882	*Moen, Philip W	1904
1871	*Moffat, E. S.	1893
1891	*Moister, I. R.	1896
1887	*Molson, Charles A.	1907
1889	*Molson, J. H. R.	1897
1877	*Moore, Charles W.	1877
1895	*Moore, E. W. S.	1895
1875	*Moore, James	1901
1905	**Morgan, Donald R.	1908
1874	*Morgan, Charles H.	1911
1879	*Morgan, J.	1892
1878	*Morgan, Thomas R.	1897
1879	*Morison, George S.	1903
1895	*Morley, B. F.	1903
1875	††Morris, Israel W.	1909
1898	**Morris, James	1911
1904	**Morris, John F.	1905
1874	*Morris, S. Fisher	1901
1881	*Morse, H. G.	1903
1899	*Moulder, H. L.	1903
1896	*Murphy, Thomas D.	1911
1900	*Mussen, Horace W.	1912
1883	*Nason, Henry B.	1894
1879	*Neilson, James	1893
1872	*Neilson, William G.	1906
1895	*Nelson, W. S.	1897
1896	*Nesmith, John W.	1909

Elected.		Died.
1885	*Newberry, W. E.	1899
1871	*Newton, Henry	1877
1874	*Newton, Isaac	1884
1873	*Nichols, Edw	1892
1893	*Nichols, N. J	1896
1882	*Nicholson, A. H	1887
1888	**Nitze, H. B. C	1900
1881	*Noble, Samuel	1888
1909	*Norbom, John O	1911
1890	†Norrie, A. Lanfear	1910
1902	*North, Edmund D	1910
1906	*North, Edwin G. N	1908
1882	*Norton, F. O	1893
1893	*Odling, F. J	1906
1887	*O'Farrell, John J	1888
1871	†Oliver, Paul A	1912
1888	*Oliver, William	1890
1881	†Oothout, E. A	1894
1897	*Orr, William	1905
1887	*Osgood, F. C	1903
1899	**Osmond, Floris**	1912
1894	*Owen, Frank	1901
1886	†Owen, J. R. D	1887
1900	*Owen, Josiah	1909
1882	*Paddock, John H	1903
1900	*Page, Clarence V	1903
1873	†Painter, A. E. W	1903
1874	*Painter, Howard	1876
1893	*Painter, William	1906
1872	*Park, James, Jr	1883
1887	†Parker, O. B	1891
1898	*Parker, William J., Jr	1905
1875	*Parkin, Charles	1904
1900	*Parks, James F	1903
1875	*Parks, John C	1902
1874	*Parsons, Charles B	1910
1874	*Parsons, Charles O	1894
1890	**Patera, Adolph**	1890
1886	*Patterson, R. P	1904
1888	*Patterson, W. E	1896
1889	*Paul, Henry	1904
1896	*Pearce, Stanley H	1906
1894	*Pelatan, Louis	1907
1885	**Percy, John**	1889
1882	**Peters, J. C	1899
1883	*Peters, Samuel	1899
1902	*Petersdorff, C. F. von	1903
1900	*Peterson, Bertel	1909
1871	**Pettee, William H	1904
1888	*Pettibone, Augustus	1890
1877	*Phelps, Walter	1878
1895	*Philips, Joseph, Jr	1905
1891	*Phillips, A. G	1903
1882	†Phillips, P. E	1884
1882	†Pierson, O. H	1882
1881	*Pitcairn, Robert	1909
1872	*Platt, Franklin	1900
1873	**Platt, J. C	1898
1875	*Platt, W. G	1885
1872	*Pleasants, Henry	1880
1880	*Plummer, J. W	1896
1902	*Poindexter, Charles L.	1912
1906	*Pomeroy, Ernest Y	1909
1889	**Pomeroy, James H	1903
1900	*Poole, Herman	1906
1884	*Porter, George A	1892
1887	**Pošepný, Franz**	1895
1882	*Potts, Francis L	1910
1886	*Potts, J. D	1893
1900	*Powell, John Henry	1903
1899	*Powell, John R	1902
1886	*Pratt, N. W	1896
1885	*Price, E. A	1893
1887	*Price, J. A	1892
1875	†Priest, J. R	1880
1881	*Prince, F	1892
1881	**Pullman, J. Wesley	1912
1889	*Quintard, E. A	1903
1898	*Ramos, Ricardo G	1906
1889	*Ramsay, M	1892
1876	*Rand, Addison C	1900
1882	*Rand, Jasper R	1900
1900	*Rand, Jasper R	1908
1873	**Rand, Theodore D	1903
1870	*Randol James B	1903
1907	*Rao, M. N. Srinivas	1908
1891	*Rawling, Charles Q	1902
1905	*Redaelli, Pietro	1910
1892	†Reddy, P	1900
1892	*Reed, H. L	1893
1900	*Regel, Ferd H	1910
1889	*Reid, J. M	1895
1883	*Reinhardt, H. O	1894
1896	†Rich, Jacob M	1903
1879	*Richards, Ellen H	1911
1875	*Richards, George	1900
1884	**Richards, John T	1896
1905	*Richardson, Davis	1909
1871	*Richter, C. E	1877
1883	**Richter, Theodor**	1898
1884	*Rickard, Alfred	1896
1884	*Rickard, Reuben	1896
1877	†Rickard, R. H	1885
1872	†Ricketson, John H	1900
1883	*Rider, W. E	1892
1886	*Ringeling, Frank	1893
1898	*Rioseco, Pedro P	1903
1883	*Riotte, Eugene N	1891
1902	†Ripley, Charles O	1905
1904	*Rising, Arthur F	1906
1899	**Roberts-Austen, W. C**	1902
1886	*Robinson, George H	1906
1890	*Robinson, L. L	1892
1878	*Robinson, Thomas W	1880
1904	*Rock, Alfred M	1907
1903	*Roepper, Francis A	1908
1882	*Rogers, A. N	1890
1893	*Roosevelt, Elliott	1894
1904	*Rose, George W	1907
1876	**Rosecrans, W. S	1898
1871	*Rothwell, Richard P	1901
1895	**Rotthoff, Wilhelm	1897
1900	**Sahlberg, August	1903
1910	*Sampson, Roswell E	1912
1882	*Santa Maria, Raymundo de	1883

Elected.		Died.
1886	*Savage, E. G.	1891
1905	*Sayles, Albert W.	1906
1903	*Saylor, Benjamin F. A.	1911
1882	*Saylor, David O.	1884
1907	*Schaefer, Edward F.	1908
1892	††Schaffer, Charles	1903
1883	*Schaufuss, E. C.	1889
1872	*Schirmer, I. F. L.	1877
1882	*Schlemm, William H.	1910
1891	*Schlink, T.	1893
1886	*Schmalensée, Carl von.	1887
1883	*Schmitz, Emerich J.	1905
1882	*Schuchard, Charles	1883
1876	†Schwartz, J. E.	1900
1880	*Scott, Cyrus E.	1912
1871	*Scranton, W. H.	1889
1901	**Seale, Herbert P	1908
1905	*Seaton, William, Jr.	1908
1888	*Seddon, Richard J.	1906
1888	*Seddon, T.	1896
1900	†Seeger, Ludwig	1905
1890	**Serlo, Albert**	1898
1906	*Sevier, John C.	1909
1904	*Sevier, Irving H.	1904
1893	*Seymour, L. I.	1900
1905	*Shaler, Fred J.	1908
1877	*Sheafer, P. W.	1891
1909	*Shelby, Charles F.	1911
1888	**Shields, C. O.	1896
1875	*Shinn, W. P.	1892
1899	*Shipman, H. A.	1910
1901	*Shrom, Harry L.	1907
1881	*Sickles, T. E.	1885
1879	**Siemens, C. William**	1883
1872	*Silliman, B.	1885
1871	*Silliman, J. M.	1896
1902	*Simpson, Gilbert C.	1907
1887	*Simpson, James C.	1906
1885	*Sims, Alfred W.	1895
1902	*Sims, Wm. J.	1903
1873	*Singer, William	1909
1893	*Sjöstedt, Ernst A.	1912
1888	*Skinner, T. L.	1894
1874	*Slade, F. J.	1891
1901	*Slavens, John H.	1904
1883	*Sluder, E. E.	1897
1880	*Smalley, W. A.	1886
1906	*Smart, George O.	1911
1902	*Smit, Egbert	1908
1890	*Smith, Frederick H.	1899
1877	*Smith, Hamilton	1900
1875	*Smith, H. S.	1899
1894	*Smith, J. Harcourt	1899
1871	*Smith, T. Guilford	1912
1887	*Smith, W. T.	1898
1899	*Snedaker, J. Angus	1912
1889	*Sperry, Francis L.	1906
1900	*Sperry, Jacob J.	1905
1881	*Spies, Albert	1910
1897	*Spotswood, George McL.	1903
1889	*Spottswood, G. A.	1896
1893	*Sprow, J. H.	1895
1886	†Squier, Charles B.	1904
1871	**Squire, Joseph	1911

Elected.		Died.
1889	*Stanley, Henry M.	1902
1900	*Stantial, Otis T.	1903
1877	†Stanton, John	1906
1897	*Stark, Herbert S.	1910
1907	*Steffens, Charles J.	1908
1872	*Steitz, Augustus	1876
1881	*Sterling, Henry S.	1882
1901	*Stern, Henry	1908
1881	*Stetefeldt, C. A.	1896
1894	*Stevens, Andrew	1895
1899	*Stevens, Edwin A.	1902
1905	*Stevens, Horace J.	1912
1896	*Stevens, Wm. F.	1902
1885	*Sticht, Ernest	1911
1891	*Stickney, C. Wade	1904
1881	*Stinson, John M.	1884
1906	*Stirling, James	1909
1874	*St. John, I. M.	1880
1885	*Stockwell, N. S.	1888
1891	*Stoddard, A. B.	1900
1886	*Stodder, R. H.	1889
1872	*Stoebling, Hermann	1875
1877	**Stoiber, Edward G.	1906
1902	*Stoiber, Gustavus H.	1905
1890	*Stollmeyer, A. B.	1890
1884	*Stone, Charles P.	1887
1892	*Stone, G. G.	1893
1906	**Storey, Thomas W. P.	1907
1888	*Straker, Tooke	1892
1893	*Striedinger, J. H.	1894
1905	*Study, W. L.	1905
1887	*Sutcliffe, John	1910
1899	**Sutherland, W. J.	1911
1904	**Swan, Archibald A.	1911
1900	*Swan, Robert M. W.	1905
1903	*Swaney, Homer H.	1904
1899	*Sweet, Thomas G.	1912
1879	*Swindell, William	1902
1898	*Swoyer, John H	1899
1873	*Symington, W. N.	1899
1871	*Symons, W. R.	1888
1889	*Szontagh, Oscar	1903
1900	*Taunton, F. W.	1900
1892	*Taylor, George R.	1903
1881	**Taylor, Percyvale	1912
1875	*Taylor, W. J.	1903
1875	*Tefft, Walter	1885
1886	*Terhune, Richard H.	1905
1882	*Thaw, Wm., Jr.	1892
1891	*Thielen, Alexander	1897
1900	**Thies, Ernst A.	1908
1892	*Thiry, Joseph	1905
1871	**Thomas, David**	1882
1892	†Thomas, D. M.	1895
1871	*Thomas, John	1897
1871	*Thomas, Samuel	1906
1881	*Thomas, Sidney G.	1885
1875	*Thompson, C. O.	1885
1894	**Thompson, F. A.	1897
1876	*Thompson, Heber S.	1911
1896	†Thompson, William T.	1899
1893	*Thomson, John L.	1900
1879	*Thonard, Leon	1886
1902	**Thow, Sydney	1907

Elected.		Died.
1875	*Thurston, Robert H...	1908
1881	*Tileman, John N.....	1888
1903	*Tisdale, John N.....	1905
1902	*Tod, Herbert N.....	1908
1900	*Toll, Abel H.....	1906
1876	*Torrance, J. F.....	1895
1890	*Torrey, Gray.....	1898
1897	*Totten, Alfred I.....	1905
1891	*Touzeau, Edward M....	1911
1878	*Tower, A.....	1891
1879	*Townsend, Henry T.....	1907
1883	*Trippel, Alexander....	1896
1881	*Troilius, M.....	1886
1897	*Tucker, Charles R. L.	1902
1887	Trimble, A. J.....	1913
1871	**Tunner, Peter Ritter** v..	1897
1895	*Turner, Robert B.....	1903
1877	*Tuttle, H. A.....	1888
1886	*Tyson, James W.....	1900
1890	*Ulrich, George H. F....	1900
1899	*Vale, Stephen W.....	1902
1876	*Valentine, M. D.....	1911
1884	*Van Slooten, Wm.....	1901
1887	*Van Tuyll, C. B.....	1890
1888	*Van Wickle, A. S.....	1898
1889	*Van Zandt, F.....	1892
1905	††Variclé, Jean A.....	1907
1880	*Veeder, H.....	1896
1874	*Vezin, Henry A.....	1902
1902	*Virgoe, Walter H.....	1905
1891	*Wagner, J. R.....	1899
1904	*Wainwright, J. H.....	1911
1888	*Waithman, Hubert.....	1891
1894	*Walker, Hamilton.....	1895
1878	†Walker, John A.....	1907
1885	†Walker, Joseph R.....	1901
1886	*Walker, W. J. B.....	1894
1897	*Wallace, James P.....	1910
1874	*Walsh, Edward, Jr.....	1901
1900	**Walsh, Thomas F.....	1910
1884	*Walter, T. Frank.....	1888
1872	*Walz, Isidor.....	1877
1902	*Wanless, George J.....	1912
1878	†Warner, L. E.....	1884
1875	**Wartenweiler, Alfred	1912
1882	*Waters, J. H. E.....	1893
1886	*Waters, Thomas J.....	1898
1887	*Watson, Frederick M..	1900
1890	*Watson, Ralph W.....	1907
1897	*Watson, Wm.....	1902
1881	*Watts, D.....	1893
1911	†Weaver, Henry M.....	1912
1882	*Webb, H. Walter.....	1900
1885	**Wedding, Hermann**.....	1908
1875	*Weeks, Joseph D.....	1896
1895	*Weir, Robert S.....	1898
1909	*Weiss, Robert A.....	1911
1875	*Welch, Ashbel.....	1882

Elected.		Died.
1890	*Wellman, Charles H...	1905
1880	*Wells, Bard.....	1893
1875	*Wendel, A.....	1881
1874	*Wendt, A. F.....	1893
1888	*West, A. R.....	1893
1896	**Wetherill, John P.....	1906
1875	*Wheatley, Charles M.	1882
1875	*Wheeler, Moses D.....	1889
1892	*Wheeler, S. Bowman...	1909
1907	*Wheeler, Wilfred F..	1909
1882	*Wheelock, Jerome.....	1902
1900	*Willard, Eugene B....	1907
1879	†Whilldin, W. I.....	1882
1892	*Whitaker, Thomas D...	1896
1886	*White, James B.....	1887
1886	*White, Maunsel.....	1912
1890	*Whitehead, Cabell.....	1908
1898	*Whyte, John S.....	1902
1877	*Wiestling, G. B.....	1891
1885	*Wilcox, S.....	1893
1883	*Wilkes, John.....	1909
1903	*Williams, Delos V. A.	1908
1888	*Williams, Frank.....	1901
1899	**Williams, Frederick de L.....	1909
1903	*Williams, Harvey L...	1905
1875	*Williams, Henry.....	1902
1883	*Williams, J. Francis...	1891
1883	*Williams, J. J.....	1892
1883	*Williams, Lewis.....	1907
1887	*Williams, Oliver.....	1904
1876	*Wilson, J. A.....	1896
1887	*Wilson, J. W.....	1894
1886	*Wilson, Walter B.....	1904
1898	*Wister, John.....	1900
1871	†Witherbee, J. G.....	1875
1871	**Witherbee, Thomas F..	1909
1882	*Wood, Alvinus B.....	1910
1883	*Wood, Howard.....	1911
1893	*Wood, James G.....	1899
1883	†Wood, W. Dewees.....	1899
1881	*Wood, Wm. J.....	1885
1895	*Woodford, Clarence A.	1898
1879	*Worthington, H. R.....	1880
1900	*Wright, Cary.....	1908
1880	*Wright, Charles E.....	1888
1902	*Wright, Fred A.....	1903
1871	†Wright, Harrison.....	1885
1876	*Wrigley, H. E.....	1884
1901	*Wrinkle, L. F. G.....	1902
1900	*Wuensch, Alfred F....	1910
1881	*Wurts, C. P.....	1892
1883	*Yardley, Thomas W....	1900
1895	*Yeates, William S.....	1908
1879	**Young, James B.....	1906
1891	*Young, James W. R.....	1902
1894	*Young, John W.....	1912

AFFILIATED STUDENT SOCIETIES.

1. Any society of undergraduates at a technical school, comprising students in any branch of engineering, metallurgy, chemistry, geology, etc., may be recognized by the Council in its discretion as an Affiliated Student Society, and its name, together with the names of its President and its Secretary, may be published in the *Bulletin* or the *Year Book* of the Institute. The individual members of such a society will not be catalogued as individual members or associates of the Institute, but may at any time be proposed for election as members or associates of the Institute, in the usual way.

2. Technical papers presented before any such society, and recommended by the officers thereof, will be received and considered by the Council as if offered by members of the Institute, and, if accepted as suitable and valuable, will be published, with the names of their authors and with due acknowledgment to the said Affiliated Society, and the members of such societies will be welcome to use the facilities of the office and Library of the Institute.

3. Membership in an Affiliated Student Society, certified by the official representative thereof, and accompanied with suitable testimony as to character and qualifications, will have special weight with the Membership Committee of the Institute, in its consideration of the proposal of a candidate for membership.

4. Upon the order of the Secretary or other designated officer of any such society, accompanied with the necessary remittance, the specified number of copies of the *Bulletin* for one year will be sent postpaid to him at the reduced price (now $5 per annum) given to public libraries. Supplementary orders at the same price will be filled as long as the supply on hand permits. The volumes of *Transactions* will be similarly furnished at the price charged to members of the Institute for extra copies (now $6 per volume). (The *Bulletin*, issued monthly, contains all the technical and professional papers published in the *Transactions*, and in addition much information concerning the library and other Society matters ; but it is not finally revised and indexed.)

5. It is understood that the terms of this relation between the Institute and the said Affiliated Student Societies may be changed at any time in the discretion of the Council of the Institute; and that the relation itself may be terminated at any time by the action of either party.

The foregoing plan gives to the individual members of Affiliated Student Societies the advantages of a collective recognition; of securing the *Bulletin* for $5 per annum (the price to non-members being now $10); of offering papers for publication; and of favorable consideration as candidates for full membership.

It does not oblige any members of an Affiliated Student Society to subscribe for the *Bulletin*, etc., or to offer papers for the *Transactions* of the Institute.

It is not confined to students in mining engineering or metallurgy. Any undergraduate society of engineers may avail itself of the privileges offered.

Societies desiring to be recognized as Affiliated Student Societies are requested to make application to the Secretary of the Institute, giving particulars as to their nature, membership, and officers.

Affiliated Student Societies.

University or College.	Society.	President.	Secretary.
Yale—Sheffield Scien. School, N. Haven, Conn.	Mining Society	Karl C. Stadtmiller	S. B. Gordy.
University of Illinois, Champaign	Student Branch of the A. I. M. E.	M. L. Nebel	Willis Leriche.
University of Nevada, Reno	Engineering Society	D. E. Bruce	R. M. Seaton.
University of Wisconsin, Madison	Mining Club	R. J. Stengl	M. C. Lake.
Lehigh University, So. Bethlehem	Mining and Geological Society	W. B. Clemmitt	W. C. Rehfuss
University of Minnesota, Minneapolis	School of Mines Society	C. A. Walker	A. C. Bierman.
Massachusetts Institute of Technology, Boston	Mining Engineering Society	L. B. Duke	L. H. Lehmaier.
University of Kansas, Lawrence	Student Auxiliary Society of the A. I. M. E.	A. H. Mangelsdorf	C. J. Hainbach.
University of Idaho, Moscow	Associated Miners	Hallard W. Foester	Walter P. Scott.
State College of Washington, Pullman	Mining and Geological Society	H. E. Doelle	B. R. Kinney.
University of Texas, Austin	Tejas Technical Society, School of Mines	G. C. Cartwright	David S. Alley.
Ohio State University, Columbus	Student Branch of the A. I. M. E.	Hugh B. Lee	E. P. Elliott.
Stanford University, Stanford Univ., Cal.	Stanford Geology and Mining Society	B. E. Parsons	E. D. Nolan.
Columbia University, New York, N. Y.	Senior Mining Society	Roger L. Strobel	Clark G. Mitchell.
University of California, Berkeley	Mining Association	F. L. Wilson	S. L. Arnot.
Tufts College, Tufts College, Mass.	Chemical Society	P. G. Savage	W. S. Frost.
University of Washington, Seattle	Mining Society	O. P. Searing	A. R. Sherman.
Iowa State College, Ames	Student Branch of the A. I. M. E.	M. B. Hadley	R. L. Hurst.
Missouri School of Mines, Rolla	Missouri Mining Association	L. S. Copelin	L. J. Boucher.
Case School of Applied Science, Cleveland, O.	Pick and Shovel Club	John M. Price	S. C. Stillwagon.
Colorado School of Mines, Golden	Scientific Society	Alan Kissock	George Wilfley.
University of Arizona, Tucson, Ariz.	Mining Engineering Society	James J. Flanigan	H. O. Coles.
University of Kentucky, Lexington, Ky.	Kentucky Mining Society	W. E. Hobson	L. V. Martin.

LIST OF THE MEETINGS OF THE INSTITUTE AND THEIR LOCALITIES FROM ITS ORGANIZATION TO MARCH, 1913.

No.	Place.	Date.	Trans. Vol.	Trans. Page.
1.	Wilkes-Barre, Pa.*	May, '71	1	3
2.	Bethlehem, Pa	Aug., '71	1	10
3.	Troy, N. Y.	Nov., '71	1	13
4.	Philadelphia, Pa	Feb., '72	1	17
5.	New York, N. Y.*	May, '72	1	20
6.	Pittsburg, Pa	Oct., '72	1	25
7.	Boston, Mass	Feb., '73	1	28
8.	Philadelphia, Pa.*	May, '73	2	3
9.	Easton, Pa	Oct., '73	2	7
10.	New York, N. Y	Feb., '74	2	11
11.	St. Louis, Mo.*	May, '74	3	3
12.	Hazleton, Pa	Oct., '74	3	8
13.	New Haven, Conn	Feb., '75	3	15
14.	Dover, N. J.*	May, '75	4	3
15.	Cleveland, O	Oct., '75	4	9
16.	Washington, D. C	Feb., '76	4	18
17.	Philadelphia, Pa.†	June, '76	5	3
18.	Philadelphia, Pa	Oct., '76	5	19
19.	New York, N. Y	Feb., '77	5	27
20.	Wilkes-Barre, Pa.*	May, '77	6	3
21.	Amenia, N. Y	Oct., '77	6	10
22.	Philadelphia, Pa	Feb., '78	6	18
23.	Chattanooga, Tenn.*	May, '78	7	3
24.	Lake George, N. Y	Oct., '78	7	103
25.	Baltimore, Md.*	Feb., '79	7	217
26.	Pittsburg, Pa	May, '79	8	3
27.	Montreal, Canada	Sept., '79	8	121
28.	New York, N. Y.*	Feb., '80	8	275
29.	Lake Superior, Mich	Aug., '80	9	1
30.	Philadelphia, Pa.*	Feb., '81	9	275
31.	Staunton, Va	May, '81	10	1
32.	Harrisburg, Pa	Oct., '81	10	119
33.	Washington, D. C.*	Feb., '82	10	225
34.	Denver, Colo	Aug., '82	11	1
35.	Boston, Mass.*	Feb., '83	11	217
36.	Roanoke, Va	June, '83	12	3
37.	Troy, N. Y	Oct., '83	12	175
38.	Cincinnati, O.*	Feb., '84	12	447
39.	Chicago, Ill	May, '84	13	1
40.	Philadelphia, Pa	Sept., '84	13	285
41.	New York, N. Y.*	Feb., '85	13	585
42.	Chattanooga, Tenn	May, '85	14	1
43.	Halifax, N. S	Sept., '85	14	307
44.	Pittsburg, Pa.*	Feb., '86	14	587
45.	Bethlehem, Pa	May, '86	15	lxiii.
46.	St. Louis, Mo	Oct., '86	15	lxx.
47.	Scranton, Pa.*	Feb., '87	15	lxxvii.
48.	Utah and Montana	July, '87	16	xvii.
49.	Duluth, Minn	July, '87	16	xxiv.
50.	Boston, Mass.*	Feb., '88	16	xxviii.
51.	Birmingham, Ala	May, '88	17	xix.
52.	Buffalo, N. Y	Oct., '88	17	xxiv.
53.	New York, N. Y.*	Feb., '89	17	xxxi.
54.	Colorado	June, '89	18	xvii.
55.	Ottawa, Canada	Oct., '89	18	xxiv.
56.	Washington, D. C.*	Feb., '90	18	xxx.
57.	New York, N. Y	Sept., '90	19	vii.
58.	New York, N. Y.*	Feb., '91	19	xxv.
59.	Cleveland, O	June, '91	20	xvi.
60.	Glen Summit, Pa	Oct., '91	20	lxi.
61.	Baltimore, Md.*	Feb., '92	21	xix.
62.	Plattsburgh, N. Y	June, '92	21	xxxiii.
63.	Reading, Pa	Oct., '92	21	xliv.
64.	Montreal, Canada*	Feb., '93	21	lii.
65.	Chicago, Ill	Aug., '93	22	xiii.
66.	Virginia Beach, Va.*	Feb., '94	24	xvii.
67.	Bridgeport, Conn	Oct., '94	24	xxxv.
68.	Florida‡	Mar., '95	25	xix.
69.	Atlanta, Ga	Oct., '95	25	xxxiii.
70.	Pittsburg, Pa.*	Feb., '96	26	xvii.
71.	Colorado	Sept., '96	26	xxix.
72.	Chicago, Ill	Feb., '97	27	xvii.
73.	Lake Superior	July, '97	27	xxx.
74.	Atlantic City, N. J.*	Feb., '98	28	xvii.
75.	Buffalo, N. Y	Oct., '98	28	xxxvi.
76.	New York, N. Y.*	Feb., '99	29	xvii.
77.	California	Sept., '99	29	xlix.
78.	Washington, D. C.*	Feb., '00	30	xix.
79.	Canada	Aug., '00	30	xlv.
80.	Richmond, Va.*	Feb., '01	31	xix.
81.	Mexico	Nov., '01	32	cxviii.
82.	Philadelphia, Pa.§	May, '02	33	xxxv.
83.	New Haven, Conn	Oct., '02	33	xlvii.
84.	Albany, N. Y.*	Feb., '03	34	xxiii.
85.	New York, N. Y	Oct., '03	34	lxi.
86.	Atlantic City, N. J.*	Feb., '04	35	xxiii.
87.	Lake Superior	Sept., '04	35	xlii.
88.	Washington, D. C	May, '05	36	xlii.
89.	British Columbia	July, '05	36	liii.
90.	Bethlehem, Pa	Feb., '06	37	xli.
91.	London, England	July, '06	37	xlviii.
92.	New York, N. Y	April, '07	38	lii.
93.	Toronto, Canada	July, '07	38	lix.
94.	New York, N. Y	Feb., '08	39	xli.
95.	Chattanooga, Tenn	Oct., '08	39	xlviii.
96.	New Haven, Conn	Feb., '09	40	xli.
97.	Spokane, Wash	Sept., '09	40	xlviii.
98.	Pittsburg, Pa	Mar., '10	41	xxxviii.
99.	Canal Zone	Nov., '10	41	xlv.
100.	Wilkes-Barre, Pa	June, '11	42	xxxiv.
101.	San Francisco, Cal	Oct., '11	42	xliv.
102.	New York, N. Y	Feb., '12	43	.....
103.	Cleveland, Ohio	Oct., '12	44	.....
104.	New York, N. Y	Feb., '13	45	.....

* Annual meeting for the election of officers. The rules were amended at the Chattanooga meeting, May, 1878, changing the annual election from May to February.

† Begun in May at Easton, Pa., for the election of officers, and adjourned to Philadelphia.

‡ Begun in February at New York City, for the election of officers, and adjourned to Florida.

§ " " " " " " " " " " " " to Philadelphia.

PUBLICATIONS.

THE publications of the Institute comprise:

TRANSACTIONS.

The volumes of *Transactions*, which are published annually, contain the list of officers, Constitution, etc., the Proceedings, and the papers revised for final publication. (In this revision, after the preliminary publication, authors are permitted to use the largest liberty; and the changes and additions made in papers are sometimes important. It should be borne in mind by those who study or quote a paper in the preliminary edition, that they may not have in that form the ultimate and deliberate expression of the author's views. It should be added, however, that in the majority of cases there are no important changes.) These volumes are for sale as follows, in paper covers:

Vols. I. to IV. (inclusive), each,	$3.00
Vols. V. to VIII. (inclusive), each,	4.00
Vol. IX.,	10.00
Vols. XI. to XXIX. (inclusive), each,	5.00
Vols. XXX. and XXXI., each,	6.00
Vol. XXXII.,	5.00
Vols. XXXIII. to XLII. (inclusive), each,	6.00

Half-morocco binding, $1 extra per volume.

The Board of Directors has authorized the following offers of sets of back volumes of the *Transactions*, at considerably reduced prices, to Members, Libraries, and Scientific Societies:

	Per Set.
I. Five volumes, bound in half-morocco, from No. 36 (1906) to No. 40 (1910),	$20
II. Ten volumes, bound in half-morocco, from No. 31 (1902) to No. 40 (1910), including Mexican Volume,	35
III. Twenty volumes, bound in half-morocco, from No. 21 (1893) to No. 40 (1910),	50
IV. Thirty volumes, bound in half-morocco, from No. 11 (1883) to No. 40 (1910),	60
V. Thirty-nine volumes, bound in half-morocco, from No. 1 (1873) to No. 40 (1910), with the exception of No. 10 (1882), but including index for Volumes Nos. 1 to 35, and Nos. 36 to 40,	75
VI. Nine volumes, bound in half-morocco, from No. 1 (1873) to No. 9 (1881),	25

BULLETIN.

Per annum, $10.00. (To members of the Institute, public libraries, educational institutions and technical societies, $5.00.

Single numbers, $1.00. (To members of the Institute, etc., $0.50.)

Index, Vols. I. to XXXV. (inclusive).—This volume, an octavo of 706 pages, affords a ready and complete reference to any subject treated or alluded to in the *Transactions*, Vols. I. to XXXV., inclusive. The names of persons, mines, works, towns, etc., have been included; and abundant cross-references and classified subheadings have been added to facilitate rapid consultation.

Bound in cloth, $5.00, half-morocco, ... $6.00

Index, Vols. XXXVI. to XL. (inclusive).—This work, containing in rearranged and condensed form the indexes of the *Transactions*, Vols. XXXVI. to XL., inclusive, is of special value in that it supplements the General Alphabetical and Analytical Index of Vols. I. to XXXV., and, by giving all of the new material contained in the technical and professional papers which have been contributed to the Institute during the five years, brings the index of all the volumes so far published fully up to the date of Vol. XL., June, 1910. An improvement has been made in the new arrangement of the material under group-headings, which, by presenting the references in tabular form, will enable the reader to find a given item more readily than in the former compact arrangement.

Bound in cloth, $1.50, half-morocco, ... $2.50

The Institute maintains at more than a hundred important mining centers throughout the world, free sets of its *Transactions*, open for consultation without fee, to all suitable applicants. Hence, the value of these indexes is by no means limited to individual possessors of complete sets of the *Transactions*. Moreover, the title of a paper, or the record of any remarks concerning a subject, being found in the Index, the Secretary's office of the Institute will supply upon written application any desired information as to the nature and length of said paper, whether it can be supplied in separate pamphlet form, etc.

SPECIAL EDITIONS.

"*The Genesis of Ore-Deposits*," comprising the famous treatise of the late Professor Franz Posepny, with the successive discussions thereof by Le Conte, Blake, Winchell, Church, Emmons, Becker, Cazin, Rickard, and Raymond (all of which were published in Volumes XXIII. and XXIV. of the *Transactions* of the Institute, and subsequently in the special "Posepny Volume," issued by the Institute); also, later papers by Van Hise, Emmons, Weed, Lindgren, Vogt, Kemp, Blake, Rickard, and others, and the discussions of these papers by De Launay, Beck, and many others (some of

these were included in Volume XXX. and the remainder appeared in Volume XXXI.); also a complete bibliography of Institute papers and discussions on this subject from 1871 to 1902.

The original Posepny volume comprised 265 pages, and was sold for $2.50, at which price the edition was long since exhausted. The present volume is an octavo of 825 pages.

Bound in cloth, ... $6.00

"*Ore-Deposits*," by Samuel Franklin Emmons, a continuation of the *Genesis of Ore-Deposits*, by Prof. Franz Posepny, comprising 29 papers descriptive of ore-deposits and discussions of their origin. Edited, with an introduction, by the late Dr. S. F. Emmons. The volume contains also a Biographical Notice of Dr. Emmons by his associate and friend, Dr. George F. Becker, and a comprehensive Bibliographical Index of the Science of Ore-Deposits, prepared by Prof. John D. Irving, H. D. Smith, and H. G. Ferguson. Dr. Emmons had finished his editorial work and written his Introduction before his lamented death in 1910; and the Volume contains his last words upon the subject to which he had given the work of his life, and on which he was justly regarded as the foremost authority. With the exception of a contribution by Mr. Penrose and the Bibliography, by Professor Irving, these papers have appeared in our *Transactions*, chiefly during the period 1900 to 1911. The authors are:—W. L. Austin, George J. Bancroft, George F. Becker, W. P. Blake, C. R. Boyd, John A. Church, Charles W. Dixon, J. R. Don, S. F. Emmons, W. H. Emmons, H. G. Ferguson, H. P. Gillette, J. B. Hastings, H. M. Howe, John D. Irving, Walter P. Jenney, James F. Kemp, Joseph Le Conte, C. K. Leith, W. Lindgren, Henry Louis, William H. Merritt, W. G. Miller, R. A. F. Penrose, R. W. Raymond, H. D. Smith. H. Sjögren, A. C. Spencer, J. E. Spurr, E. A. Stevens, H. S. Washington, Walter Harvey Weed, H. V. Winchell, Arthur Winslow.

About 1000 pages, illustrated.

Bound in cloth, $5.00, half-morocco, ... $6.00

"*The Evolution of Mine-Surveying Instruments.*" This is a volume of about 400 pages, containing the original paper of Mr. Dunbar D. Scott on that subject (*Transactions*, XXVIII.), first published in 1898, together with later papers, continuing the same subject, and discussions thereof, by Hoskold, Lyman, Davis and many others.

Bound in cloth, ... $3.50

Year Book, containing List of Members, Constitution, etc., paper; to Members of the Institute, $0.50; to others, 1.00

Glossary of Mining and Metallurgical Terms (1881), cloth, . 1.00

Spanish-American Mining and Metallurgical Glossary, bound in leather, pocket-size, 96 pages, ... 0.75

Chart for the Solution of Kutter's Formula, on cloth, . . . 0.50

Pamphlets.

1. The Minutes of the Proceedings of each Meeting.

2. Such of the papers presented or read by title at each Meeting as are furnished by the authors and approved by the Council for full publication. These papers are published separately in pamphlet form, and are marked "subject to revision." Beyond the *Bulletin* edition, a small supply is retained to meet subsequent demand. The stock is nearly complete from 1880. These papers are for sale at the following prices:

No. of Pages.	Single Copies.	10 Copies.	20 Copies.
24 or less	$0.25	$2.00	$3.50
25 to 48	0.30	2.50	4.50
49 to 80	0.35	3.00	5.00
81 to 96	0.40	3.50	6.00
97 to 128	0.45	3.75	6.25
129 to 144	0.50	4.00	6.50
145 to 160	0.55	4.25	6.75
161 to 176	0.60	4.50	7.00

Authors' Edition of Pamphlets.

Extra copies of pamphlets, if ordered before the printing of the *Bulletin*, will be furnished to members of the Institute at special rates.

CERTIFICATE OF INCORPORATION.

[Amended Nov. 22, 1912.]

We the undersigned, being all persons of full age and citizens of the United States, and a majority residents of the State of New York, desiring to form a corporation pursuant to the provisions of the Membership Corporations Law for the purpose of incorporating, as provided in Section 5 of Article I. of said law, the existing unincorporated association known as American Institute of Mining Engineers, do hereby make, acknowledge and file this Certificate for that purpose, and do Certify as follows:

I. That the American Institute of Mining Engineers is an unincorporated association organized and existing with the object of promoting the arts and sciences connected with the economic production of the useful minerals and metals and the welfare of those employed in these industries by means of meetings for social intercourse and the reading and discussion of professional papers, and to circulate by means of publications among its members and associates the information thus obtained.

II. That the persons duly appointed or designated to manage the affairs of said association are designated by the rules thereof Members of its Council; that the undersigned are all members of said Council as the same was constituted on the 29th day of December, 1904.

III. That on said last-mentioned date a regularly called meeting of said association was held at its office in the Borough of Manhattan, City of New York; that thirty days before such meeting notice of the intention to incorporate said association was given by mail to each member thereof whose residence or post-office address is known; that at said meeting the following resolutions were offered, seconded and duly adopted by the unanimous vote of all its members then present, to wit:

"*Resolved*, That it is the sense of the members and associates of the American Institute of Mining Engineers in general meeting assembled that it is desirable and necessary for the well being of said association and its members and for the furtherance of the objects for which the same has been formed, that said association incorporate under the Membership Corporations Law of the State of New York;

"*And Further Resolved*, That the Members of the Council of this Association, or a majority thereof, be and they hereby are authorized, in accordance with the provisions of Section 5 of Article I. of the Membership Corporations Law, to incorporate this association for the same purposes for which it has been organized and conducted, in the manner provided in Article II. of said law;

"*And Further Resolved*, That the name of said corporation as hereby adopted by this meeting shall be American Institute of Mining Engineers.

"*And Further Resolved*, That the said incorporators shall be named in the Certificate of Incorporation as directors of such corporation until its first annual meeting, and that such directors and their successors in office shall be and they hereby are authorized to enact and adopt a Constitution and By-Laws for the government of said corporation."

IV. That the name of the proposed corporation is American Institute of Mining Engineers.

V. That the purposes for which this corporation is to be formed are: To promote the arts and sciences connected with the economic production of the useful minerals and metals and the welfare of those employed in these industries by means of meetings for social intercourse, and the reading and discussion of pro-

fessional papers, and to circulate by means of publications among its members the information thus obtained; and to establish and maintain a place of meeting for its members and a hall for the reading of papers and delivery of addresses, and a library of books relating to subjects cognate to the sciences and arts of mining and metallurgy.

VI. That the territory in which the operations of this corporation are to be principally conducted is the United States of America, and the principal office for the transaction of its affairs is to be located in the City, County and State of New York.

VII. That the duration of this corporation is to be perpetual.

VIII. That the number of Directors of this corporation is to be twenty-four, consisting of one President, two Past Presidents, six Vice-Presidents, and fifteen other Directors; that at the annual meeting to be held in February, 1913, there shall be elected to serve, jointly with the six members of the former Board whose terms will not then have expired, one President, who shall serve as such for one year, and as Past President for two years; two Past Presidents to be selected from former Presidents of the Institute, one to serve for one year and one to serve for two years; six Vice-Presidents, of whom two shall be elected to serve for one year, two for two years and two for three years, and nine Directors, of whom two shall be elected to serve for one year, two for two years and five for three years.

After the year 1913 there shall be elected at each annual meeting one President to serve as such for one year and as Past President for two years; two Vice-Presidents to serve for three years and five Directors to serve for three years.

At each subsequent annual meeting so many Directors only shall be elected as shall be necessary to fill vacancies then existing in the Board, and each Director then chosen shall be elected to serve for three years unless the vacancy which he shall be chosen to fill has been caused otherwise than by expiration of the former incumbent's term of office, in which event he shall be elected to serve for the balance of his predecessor's unexpired term.

IX. That the time for holding the annual meeting of this corporation shall be the third Tuesday of February in each year.

X. That the names and post-office addresses of the subscribers hereto who are to be directors of this corporation until the first annual meeting are

Names.	Post-Office Addresses.
James Gayley,	71 Broadway, New York City;
Frank Lyman,	88 Wall Street, New York City;
James F. Kemp,	Columbia University, New York City;
Charles H. Snow,	New York University, New York City;
Frank Klepetko,	24 State Street, New York City;
Thomas A. Rickard,	261 Broadway, New York City;
James Douglas,	99 John Street, New York City;
Albert R. Ledoux,	99 John Street, New York City;
Rossiter W. Raymond,	99 John Street, New York City.

The above certificate, dated December 30, 1904, was signed and acknowledged by the subscribers before William A. Lockwood, Notary Public (No. 74), New York County.

I, the undersigned, Justice of the Supreme Court of the State of New York, do hereby approve of the above Certificate of Incorporation of the American Institute of Mining Engineers, and do authorize the same to be filed.

SAMUEL GREENBAUM,
Justice of the Supreme Court.

January 7, 1905.

CONSTITUTION AND BY-LAWS.

Constitution.

[Adopted Feb. 18, 1913.]

ARTICLE I.

Name and Object.

Sec. 1. This Institute is incorporated under the Membership Corporations law of the State of New York; its corporate name is American Institute of Mining Engineers; and its objects are such as are stated in its Certificate of Incorporation.

ARTICLE II.

Members.

Sec. 1. The membership of the Institute shall comprise four classes, namely: 1. Members; 2. Honorary Members; 3. Associates; 4. Junior Members.

All members shall be equally entitled to the privileges of membership, excepting that Honorary Members, Junior Members, and Members and Associates whose residences shall be outside of the United States, Mexico, and Canada shall not be entitled to vote. Members and Associates residing within the United States of America, Mexico, and Canada, and not in arrears for dues, shall be entitled to vote in person at the meetings of the Institute, or, as hereinafter provided for, by letter ballot.

Sec. 2. The following classes of persons shall be eligible for membership in the Institute, namely: as Members, all professional mining engineers, geologists, metallurgists, or chemists, and all persons actively engaged in mining and metallurgical engineering, geology, or chemistry; as Associates, all persons desirous of being connected with the Institute who in the opinion of the Board of Directors are suitable.

As Junior Members, all students in good standing in engineering schools who have not taken their degrees and who are nominated by at least two of their instructors. A Junior Member may remain such not longer than three years after leaving the engineering school, at the end of which period his qualifications to become a Member or Associate must be passed upon by the Membership Committee. If elected he shall pay at that time the entrance fee and dues of a Member or Associate.

Every candidate for election as a Member, Associate, or Junior Member must be proposed for election by at least three Members or Associates, must be approved by the Committee on Membership, as prescribed in the By-Laws, and must be elected by the Board of Directors.

Sec. 3. Not less than three-fourths of the votes cast shall be necessary to an election; newly elected candidates shall be immediately notified of their election and also of their obligations, by the Secretary of the Institute. Every person so elected shall become a Member or Associate or Junior Member of the Institute in

the class to which he is chosen, upon payment of his initiation fee, if required by this Constitution, and first year's dues, as hereinafter stated. Each candidate for Honorary Membership must be recommended by at least ten Members and must be elected by ballot at a meeting of the Board of Directors by the unanimous vote of the Directors present; provided, however, that the number of Honorary Members shall at no time exceed twenty.

SEC. 4. If any person elected a Member, Associate, or Junior Member does not within four months after the mailing of notice of his election accept the same and pay his initiation fee, if required, and dues for the year in which he was elected, his election shall be null and void and he shall be notified thereof by the Secretary of the Institute; providing, however, that if elected in the months of October, November, or December, the candidate may, at his option, pay dues only for the ensuing year, in which case he shall be entitled to receive the *Bulletin* of the Institute for the months of November and December, but not the annual volume of the year during which he was elected to membership.

SEC. 5. The Board may at any time, for good and sufficient reasons, change the classification of a member of any class except Honorary Members.

ARTICLE III.

DUES.

SEC. 1. The dues of Members and Associates shall be, until otherwise determined by the Institute, ten dollars per annum, and those of Junior Members shall be five dollars per annum. All dues shall be payable in advance on the first day of each calendar year, and notice to this effect shall be published in the last number of the *Bulletin* of each calendar year, and a bill shall be mailed to each Member, Associate, and Junior Member on the first day of the month of January in each year, stating the amount of dues and date when payable and the penalty and conditions incident to default in payment within the limit of time set by the Constitution.

Each newly elected Member or Associate shall pay, immediately on notification of his election, an initiation fee of ten dollars; Junior Members shall not pay any initiation fee. Honorary Members shall not be liable for initiation fees or dues.

If any Member, Junior Member, or Associate is in arrears for four months, the *Bulletin* shall no longer be sent to him and he shall be notified by the Secretary of the Institute that no publications will be sent him until his arrears be paid. Any Member, Junior Member, or Associate in arrears for one year shall be dropped from the rolls unless the time for payment is extended by the Directors. A member so dropped may be reinstated by the Directors on paying all arrears of dues.

SEC. 2. The Board of Directors shall have the right to increase the dues of the membership for the next ensuing year or years by any sum not to exceed the amount of five dollars per annum, such increase of dues to be applicable solely to the extinction of the principal of the land debt of the Institute. As soon as such indebtedness is paid the dues shall automatically return to those provided in Section 1 of this Article.

SEC. 3. Any Member or Associate not in arrears may become, by the payment of one hundred and fifty dollars at one time, a Life Member or Life Associate, and shall not be liable thereafter to pay annual dues. The money thus received shall be invested and only the income thereof used for current expenses of the Institute.

ARTICLE IV.

Business Meetings of the Institute.

Sec. 1. The annual meeting of the Institute for the election of Directors and transaction of other business shall be held at the headquarters of the Institute in the City of New York on the third Tuesday in February in each year. A report of the financial condition of the Institute and an abstract of the accounts shall be furnished by the Directors, and presented at each annual meeting.

Sec. 2. Special business meetings of the Institute may be held at such times and places in the State of New York as the Board of Directors may appoint, upon notice to all Members and Associates entitled to vote, directed to each at his last known post-office address, and mailed not less than twenty days before the date fixed for such meeting.

Sec. 3. At all business meetings of the Institute the presence of twenty-five Members and (or) Associates shall constitute a quorum.

Sec. 4. At all business meetings of the Institute, Members and Associates entitled to vote may vote only in person. Any matter which is presented over the signatures of twenty-five Members or Associates, or which is advocated or opposed by twenty-five Members or Associates present at a business meeting of the Institute, or which the Board of Directors may wish to refer to the membership for decision, shall be sent out to the membership for a vote thereon by letter ballot, accompanied by a statement prepared by the Board of Directors giving the arguments for and against its adoption. Only Members and Associates entitled to vote may vote thereon.

Sec. 5. All meetings of the Institute other than business meetings shall be held at such times and places as the Board may appoint. Notice of all such meetings shall be given to all Members, Associates, and Junior Members by mail.

ARTICLE V.

Directors and Officers.

Sec. 1. The business, financial, professional, technical, scientific and social interests of the Institute shall be managed by and under a Board of Directors, elected annually by letter ballot in the manner specified in this Constitution or in the By-Laws, to serve for the terms set forth in the Certificate of Incorporation.

Sec. 2. The Board of Directors shall consist of a President, two Past Presidents, six Vice-Presidents, and fifteen Directors.

Eight Directors shall be elected annually by letter ballot: One of said eight shall be designated as "Director and President" and two shall be designated as "Director and Vice-President."

Sec. 3. The officers of the corporation, who shall also be termed the respective officers of the Institute, shall be a President, First Vice-President, Secretary, and Treasurer. The President shall be that Director who is chosen at the annual election as "President." He shall serve as President for one year, and for the subsequent two years of his directorate be termed "Past President of the Institute." The President shall be ineligible for re-election as such until two years after expiration of his term as President.

At the first meeting of the Board of Directors after the annual business meeting of the Institute, the Board shall elect a First Vice-President, to hold office for one year, from among the Vice-Presidents of the Board; a Secretary, who may or may not be a member of the Board, to serve for one year; and a Treasurer from among

the members of the Board, to hold office for one year. The Secretary or the Treasurer may be removed from office at any time by a unanimous vote of the Directors present at a special or regular meeting of the Board, due notice having been given in advance that such action is to be considered at said meeting. The Secretary shall receive such salary as may be fixed by the Board of Directors.

The duties of all officers shall be such as usually pertain to their respective offices, together with such other duties as may from time to time be prescribed for them by the By-Laws or Board of Directors. The Treasurer shall give a bond for the faithful performance of his duties, in a sum to be fixed by the Board of Directors, but at the expense of the Institute.

SEC. 4. In the event of a vacancy occurring in the Board of Directors by death, resignation, promotion by election as President or Vice-President, or for any other reason than retirement at the end of three years' service, the remaining members of the Board shall elect a successor to fill the vacancy and to serve for the unexpired term. A member of the Board whose term has not expired and who is elected President or Vice-President at an annual election shall be considered to have vacated the former office held by him, and the Board shall fill the vacancy as above provided.

SEC. 5. The Board of Directors may, from time to time, in its discretion, appoint any Past Secretary of the Institute "*Secretary Emeritus*," to receive such compensation and to perform such duties as the Board may designate.

SEC. 6. The Board of Directors may authorize the formation of Local Sections, Technical Committees, or arrange affiliations with other Societies in accordance with this Constitution and the By-Laws.

SEC. 7. The Board of Directors may appoint standing and special committees charged with such duties as the Board may assign. Such committees shall be directly responsible to, and report to the Board, and take only such responsibilities as the Board shall authorize.

SEC. 8. At the first meeting of the Board of Directors after the annual meeting of the Institute, it shall appoint an Executive Committee of five of its members, three of whom shall constitute a quorum. This committee may act for the Board between meetings of the Board and at any regular or special meeting whenever a quorum of six Directors is not present. The Executive Committee is not authorized to perform the following acts, or any others the Board may see fit to interdict, viz. : fill vacancies on the Board ; elect the First Vice-President, Secretary, or Treasurer ; fix salaries of officers (it may fix those of employees) ; vote extra compensation to officers ; vote extraordinary expenses or incur obligations of over five hundred dollars ; take action affecting already invested funds or property rights of the Institute ; elect Honorary Members ; expel Members.

SEC. 9. The Chairmen of Local Sections or appointed representatives thereof, and the chairmen of the Technical Committees or Divisions of the Institute, if not members of the Board of Directors, shall be notified of and have the privilege of attending all meetings of the Board, but without the right to vote. They may participate in discussion, and shall receive the minutes of the Board's meetings.

SEC. 10. All salaries paid by the Institute shall be fixed in advance by the Board of Directors, but no salary shall be fixed in advance for a period longer than twelve months.

SEC. 11. The funds of the Institute shall be paid out only by check signed by the Treasurer and countersigned by the Secretary ; in case of absence or disability, the President or First Vice-President may act for the Treasurer, or any Vice-President for the Secretary.

SEC. 12. The Directors may appoint an Assistant Secretary, who shall, under the instructions of the Board, have charge of such of the business affairs of the Institute as may be assigned to him by the Board. His salary shall be fixed by the Board, and he shall hold office during its pleasure.

ARTICLE VI.

MEETINGS OF THE BOARD OF DIRECTORS.

SEC. 1. A regular meeting of the Board of Directors for the election of officers and the transaction of other business shall be held in February of each year, at the headquarters of the Institute, in New York City, after the annual business meeting of the Institute has adjourned.

SEC. 2. The Board of Directors shall also meet once each month except in July and August, on a regular date to be fixed at its February meeting, for the transaction of such business as may come before it.

A conference of the Board may be called at the request of three members of the Board, or by the President, to meet at any time or place, in connection with a meeting of the Institute for reading and discussion of papers or for the discussion of matters affecting the welfare of the Institute. All recommendations adopted by a majority of those present at such conference shall be transmitted to the Secretary of the Institute, accompanied by a record of the number favoring such recommendations, together with notes of the discussion thereon, and by him brought before the next meeting of the Board of Directors for consideration and such action as it may deem expedient.

Special meetings of the Board shall be called by the Secretary at the request of the President, First Vice-President, or any three members of the Board, to meet at any time and place, by notice mailed to the members of the Board at least ten days in advance, or by telegram sent at least five days in advance of the date of the meeting to members in North America (Alaska excepted).

SEC. 3. At all meetings of the Board of Directors the presence of six members shall constitute a quorum. In the absence of said quorum at any meeting of the Board, a quorum of the Executive Committee, if present, shall transact such necessary business as is within the powers delegated to that Committee.

ARTICLE VII.

NOMINATION AND ELECTION OF DIRECTORS AND OFFICERS.

SEC. 1. A ticket of nomination for offices and places annually falling vacant in the Board of Directors shall be prepared by a Committee on Nominations, of which no member shall be, at the time, on the Board. This Committee shall consist of the Chairmen of three Local Sections, one ex-President, and three other Members of the Institute, and, on recommendations made by the President of the Institute, shall be appointed by a vote of the Board of Directors, within ninety days after the annual meeting, and it shall then proceed to the selection of candidates and the naming of a ticket. In making such selections, the nominating committee shall, so far as practicable, distribute the representation on the Board geographically, so that seven members shall be residents of the district including New York City and the territory within a radius of fifty miles of the headquarters of the Institute, and one member a resident of each of the geographical districts enumerated in the By-Laws.

The official ticket thus formulated shall be transmitted to the Secretary of the Institute, not later than the last Friday in October, be submitted to the Board at

its October meeting for its consideration, published in the November *Bulletin*, and not later than January 1 be printed and sent to the membership. Any complete or partial ticket of nominees signed by any twenty-five Members or Associates of the Institute and transmitted to the Secretary by December 15 shall also be printed and circulated with the official ticket and over the names and with the recommendations of the nominators, together with an expression of opinion of the Board thereon if deemed expedient.

Sec. 2. The election ballots mailed with the nominations shall contain space for the naming of eight Directors, of which the first shall be designated: "For Director and President," the second and third: "For Director and Vice-President," and the rest: "For Director." They shall be accompanied by small inside adhesive envelopes marked: "Ballot. Do not sign," and outer mailing envelopes addressed to the Secretary and marked "Enclosing Ballots only." Members voting shall not sign their names to the ballot, but seal it in the inner envelope, enclose it in the outer mailing envelope, and write their names on the outside, in the place provided. Cumulative voting shall not be permitted. Letter ballots must reach the Secretary on or before the second Tuesday in February. He shall give them unopened to tellers, to be appointed by the Board of Directors at its January meeting, at least three days before the annual business meeting, marking plainly those from Members not entitled to vote, because of geographical location or by being one year or more in arrears for dues. The tellers shall open and count the valid ballots received from Members entitled to vote, rejecting any unidentified by the name of the sender on the outer envelope; they shall prepare a report of the voting and hand it to the Chairman of the annual business meeting of the Institute. The latter shall declare elected to the respective offices the eligible persons receiving the highest number of votes. The ballots and unopened letters shall be returned to the Secretary at the annual business meeting; the latter shall preserve them one month, and then destroy the ballots which have been counted, and open and destroy the others.

Sec. 3. At the annual election in February, 1913, at which time the former Board of nine Directors, of whom three will on that day retire, is, under the amended Certificate of Incorporation, to be succeeded by a new Board of twenty-four Directors, the Institute shall elect by letter ballot in the manner hereinabove provided (save that nomination therefor shall have been made by a committee appointed for that purpose by the Board of Directors prior to December 15, 1912), the following new Directors:

One President and Director, who shall serve as President for one year and as Past President for two years; two Past Presidents to be selected from former Presidents of the Institute, one to serve for one year and one to serve for two years; six Vice-Presidents, of whom two shall be elected to serve for one year, two for two years, and two for three years; and nine Directors, of whom two shall be elected to serve for one year, two for two years, and five for three years.

ARTICLE VIII.

Papers and Publications.

Sec. 1. The Board of Directors shall appoint a Committee on Papers and Publications, of which the Secretary shall be a member, whose duty shall be to pass upon the fitness of technical communications submitted for publication by the Institute. Stenographic or contributed discussions of papers may be passed upon by the Secretary, in consultation with members of the above committee.

SEC. 2. The Institute shall not assume responsibilities for any statements of fact or opinion advanced in the papers or discussions at its meetings. Neither the Board nor the Institute shall officially approve or disapprove any technical or scientific opinion, or of any proposed enterprise which is outside of the management of the meetings, discussions and publications of the Institute, and the conduct of its business affairs by the Board of Directors.

SEC. 3. Special committees may from time to time be appointed by the Board to make investigations and prepare reports for presentation to the Institute, but no action shall be taken binding the Institute for or against the conclusions embodied in any such reports.

ARTICLE IX.

SUSPENSIONS AND EXPULSIONS.

SEC. 1. Any member of the Institute who shall be convicted of a crime involving, in the opinion of the Board of Directors, moral turpitude, shall, upon the passage by the Board of Directors of a resolution declaring the crime for which he has been convicted to be of such character, be thereupon dropped from membership in this Institute.

SEC. 2. Any Member of the Institute may be suspended or expelled for misconduct by the Board of Directors, after charges setting forth such misconduct shall have been prepared and filed in writing with the Board. Upon the receipt of such charges in writing, the Board may, in its discretion, suspend such Member pending a hearing and determination thereupon. As soon as may be after the receipt of such charges, the Board shall fix a date for a hearing thereupon and shall give to the accused Member notice thereof in writing, mailed to him at his last known post office address not less than thirty days before said date, accompanied by a copy of the charges and a copy of the second, third and fourth sections of this article.

SEC. 3. Upon the day fixed for the hearing, the accused Member may appear before the Board, either in person or by an accredited representative ; hear any witnesses who may be called in support of the charges and, at his option, cross-examine the same, and hear read any documentary evidence offered in support of the charges. The accused may, in his discretion, produce and examine witnesses in his defense, and submit documentary evidence, including a statement from himself in writing. After the conclusion of the hearing, the Board of Directors shall consider and vote to approve or disapprove the charges. If the Board shall, by a vote of two-thirds of its members, declare the charges sustained, it may suspend the Member for a stated period, or expel him.

SEC. 4. If the accused Member shall not appear at the hearing, and shall within three months thereafter file with the Board an affidavit stating that he had not received notice of the charges against him in time to enable him to present his defense, the Board shall fix a date for a re-hearing within three months from the receipt of such affidavit, and shall immediately notify the accused Member by mail of such date. Upon the re-hearing, the accused shall have the same privilege of presenting his defense as he would have had upon the original hearing ; and after the defense is presented, the Board shall take a new vote upon the charges, the result of which shall be conclusive.

ARTICLE X.

Amendments.

Sec. 1. Proposals to amend this Constitution shall be presented in writing to the Board of Directors, signed by at least ten Members; they shall reach the Secretary not later than October fifteenth. The Board of Directors shall consider them and the proposers shall be notified of the opinion of the Board in regard to them, and they may then either withdraw their proposals, or accept any changes suggested, or insist on the original form. The original form, if insisted upon, together with the changes proposed by the Board, if such there be, shall be mailed to all Members on or before January first, with the election ballots, and with a ballot in proper form for voting upon the amendment in its original or amended form. Ballots shall be received by the Secretary until the second Tuesday in February. The Tellers of the election shall count these ballots, and report the result to the Chairman of the annual meeting. Any members present in person at the annual meeting who have not voted on the amendments by ballot, shall have the privilege of having their votes recorded before the result of the voting is announced. Any proposed amendment which shall have been accepted by a majority of the votes thus cast, shall be adopted.

By-Laws.

I. Presiding Officer.

At all business meetings of the Institute the President, or, in his absence, the First Vice-President, or, in the absence of both of them, any other Vice-President or Director, chosen by the meeting, shall preside.

At all other meetings of the Institute the President, or, in his absence, one of the Vice-Presidents, shall preside. If none of these be present the meeting shall elect a Chairman.

II. Order of Business.

At each business meeting of the Institute the order of business shall be as follows:

1. Reading of minutes of preceding meeting.
2. Report of the President.
3. Report of the Treasurer.
4. Report of the Secretary.
5. Election of Directors.
6. Reports of Standing Committees.
7. Reports of Special Committees.
8. Special Orders.
9. Miscellaneous business.

This order of business may be changed at any meeting, by a vote of a majority of the Members and Associates present.

At all sessions of the Institute, other than business meetings, the order of proceedings and the time of adjournment shall rest in the discretion of the presiding officer.

III. Secretary of the Institute.

The Secretary shall keep a record of the proceedings of all meetings of the Institute. He shall be custodian of the corporate seal, of the minute books, and of all legal documents belonging to the Institute. He shall have charge, on behalf of the Institute, of all correspondence except such as pertains directly to the office of the Treasurer.

He shall notify all Officers and Directors and all members of committees of their election and appointment; shall issue notices of all meetings of the Board, and of the annual and other business meetings of the Institute; and shall, in calling special meetings of the Directors, specify the objects of such meetings. He shall act as clerk at all the meetings of the Board of Directors and at all meetings of the Institute.

The Secretary shall be custodian of all technical or scientific papers submitted to the Institute for its consideration, shall have general charge and supervision of the editing and proof-reading of all material published by the Institute, and of the distribution thereof, and be *ex officio* Chairman of the Committee on Publications.

On the first day of May following the year in which each volume of *Transac-*

tions is printed, he shall turn over to the Library Committee all copies of the same not theretofore distributed by him.

The Secretary may, with the approval of the Board of Directors, employ such persons as are necessary to constitute a clerical and office force, at such salaries as shall be approved by the Board of Directors or its Executive Committee. He shall be the immediate superior of all such employees.

IV. Assistant Secretary.

The Board of Directors may, upon request of the Secretary, appoint an Assistant Secretary, to take charge of such portion of the Secretary's duties as may be assigned him by the Board or its Executive Committee, such as supervising the printing and distribution of advance papers, of the *Bulletin* and *Transactions*, soliciting advertising and conducting general business correspondence.

During the absence of the Secretary at meetings of the Institute, or for other reasons, he shall act as Secretary *pro tem.*

V. Treasurer.

The Treasurer shall collect and, under the direction of the Board of Directors, shall disburse all funds of the Institute. He shall keep regular accounts in books belonging to the Institute, which shall be open to any member of the Board of Directors. He shall report in writing at each annual meeting of the Institute, and at every regular meeting of the Board of Directors, the balance of money on hand, and any existing appropriations which may affect the same.

His accounts shall be audited annually by a committee of three Members or Associates to be appointed by the President at least thirty days prior to the annual meeting in each year, which committee shall report thereon at such annual meeting. The committee may employ a public accountant to assist it, at the expense of the Institute.

The Treasurer may, at his discretion, place funds of the Institute, not at any time exceeding five hundred dollars, in the hands of the Secretary, Assistant Secretary or Assistant Treasurer, and may delegate to either of them the duty of paying, therefrom, the smaller current expenses of the Institute. The Treasurer shall examine this "Cash Box" account each month.

The Treasurer shall be solely responsible to the Institute for all moneys received, whether the same are entrusted to others or not, and may require from any one to whom he entrusts funds, a bond, running to the Treasurer personally and taken at the expense of the Institute.

VI. Assistant Treasurer.

The Board of Directors may appoint an Assistant Treasurer, to whom it may delegate the duties of conducting, under the supervision of the Treasurer, correspondence incidental to the office of Treasurer, of collecting, receiving and depositing in bank, to the credit of the Institute, all moneys, and of paying, out of a special account, if entrusted to him, the smaller current expenses of the Institute, subject to the instructions of the Treasurer. He shall hold no other office.

VII. Standing Committees.

The standing committees of the Institute shall be four: A Finance Committee, a Library Committee, a Committee on Publications, and a Committee on Membership.

The Finance Committee shall consist of three members of the Board of Directors, who shall be appointed by the Board at its first meeting after the annual meeting of the Institute in each year.

The Library Committee shall consist of the Secretary of the Institute and four other Members or Associates of the Institute, one being appointed annually by the President, at the first meeting of the Board after the annual business meeting of the Institute, to serve for four years, in conformity with the By-Laws of the United Engineering Society, approved by the Board of Directors of the Institute.

The Committee on Publications shall consist of the Secretary of the Institute, who shall be its chairman, and at least twelve specialists, Members of the Institute, to assist in passing on all papers offered for publication. They shall be appointed annually by the newly-elected President.

The Committee on Membership shall consist of five Members of the Institute, the Chairman and at least one other member being chosen from the Board of Directors, and shall be appointed by the President at the first meeting of the Board after the annual business meeting of the Institute.

VIII. Finance Committee.

It shall be the duty of the Finance Committee to inquire into and examine the financial condition of the Institute and to consider proper means of increasing its revenues and of limiting its expenses. It shall report at each monthly meeting of the Board, and at other times whenever it shall desire or be directed so to do; and the Treasurer shall at all times furnish it with such statements and information as it may desire.

It shall determine, with the approval of the Board, the investment of such surplus moneys as shall from time to time accrue to the Institute. It shall, at least once in each year, examine the securities belonging to the Institute, and report thereon to the Board.

It may, at any time, examine the books and vouchers of the Treasurer and Assistant Treasurer.

The Treasurer shall not be a member of the Finance Committee, but shall attend the meetings of the same if requested.

The Finance Committee shall present a budget to the Directors at the meeting preceding the annual meeting of the Institute. This budget shall give an itemized estimate of the receipts and expenses of the Institute for the ensuing year. The Directors shall pass on this budget at their first meeting after the annual business meeting of the Institute, modifying it as they consider necessary, and make definite, detailed appropriations for the following year.

All bills, accounts, salaries, pay-rolls and claims of every kind against the Institute shall, before being paid, be examined by the Finance Committee and be approved by at least one member of the Committee. The Committee shall not authorize any payments in excess of appropriations. If at any time any of the appropriations seems in danger of being insufficient the Finance Committee shall report the same to the Directors.

IX. Library Committee.

The Library Committee shall constitute the official representatives of the Institute upon the Library Board of the United Engineering Society, and be guided by the By-Laws of that Society, as approved by the Board of Directors of this Institute, with full powers to act for the Institute within the appropriations allowed by the Board of Directors.

The Library Committee shall be the custodian of all books in the Institute library and of additions thereto; also of all back numbers of the *Transactions* of the Institute. It shall, on the first day of May of each year, receive from the Secretary and receipt for all the volumes of *Transactions* and *Bulletins* or other publications for the preceding year not previously distributed by said Secretary.

It shall cause to be kept, under the directions of the Secretary, a catalogue of all books in the library and an account in ledger form of all volumes of *Transactions* in its custody, in which shall be charged all volumes delivered to it, and in which shall be credited all volumes taken from its custody for sale or for any other purpose.

It shall make a written report annually to the Board of Directors, stating the stock of publications on hand, and a detailed statement of sales during the year, together with such observations and recommendations as it may wish, regarding said publications or the conduct of the library.

X. Committee on Publications.

1. This Committee shall perform its functions as follows:

(*a*) On the receipt of a paper by the Secretary (Chairman), he shall send it to the member of this Committee who, in his judgment, is most competent and available to pass upon it, as "Reader," accompanying the paper with his own opinion of its suitableness for publication, and any other pertinent information.

(*b*) If the Reader and the Chairman agree upon the suitability or unsuitability of the paper, it shall be considered accepted for publication or rejected, as the case may be.

(*c*) If these two do not agree, the paper shall be submitted to a third member of the committee, and the opinion of two of these three members shall decide the matter.

(*d*) If a paper has been refused publication, the author shall have the right of appeal, in which case the persons previously passing on the paper, together with others selected from the Committee by the President—making five altogether—shall decide the question.

(*e*) If a paper has been accepted for publication, it shall be considered eligible to be placed on the program of a meeting.

2. The placing of a paper upon the program of a meeting shall not give it the right to be published in the *Bulletin* or *Transactions* of the Institute; its suitability for publication must in every case be passed upon by the Committee, as provided for in Section 1 of this Article.

3. In case the Secretary is unable to secure a decision as to the suitability or unsuitability of a paper for publication, as directed in Section 1, before the time of announcing the program of a meeting, he may at his own discretion place the paper upon the program of the meeting, or refuse it a place thereon.

XI. Committee on Membership.

All nominations for Members, Associates, or Junior Members of the Institute shall be submitted to and passed upon by the Committee on Membership. This Committee shall meet at least once in each calendar month, with the exception of the months of July and August. It shall receive and consider all communications respecting candidates, and shall make diligent inquiry as to the character and qualification of each. Its proceedings shall be reported to the Board, if required, but otherwise shall be secret and confidential.

No member of the committee shall propose any candidate.

XII. Election of Members.

After the Committee on Membership shall have reported to the Board its conclusions as to the acceptability of each candidate, the Board shall vote upon the same. No person shall be proposed for election to the Institute within one year after his name shall have been rejected by the Board.

XIII. Nominations.

The geographical districts to be considered by the Committee on Nominations shall be as follows, until otherwise ordered by the Board.

District No. 1. New England, New York, and New Jersey, excepting New York City and district, which is provided for in the Constitution.

District No. 2. Pennsylvania.

District No. 3. Ohio, Indiana, Illinois, Iowa, and Missouri.

District No. 4. Minnesota, Wisconsin, and Michigan.

District No. 5. Montana, North and South Dakota, Wyoming, Nebraska, Kansas, Washington, Oregon, Idaho, and Alaska.

District No. 6. California and Nevada.

District No. 7. Utah, Colorado, Arizona, and New Mexico.

District No. 8. Louisiana and Texas.

District No. 9. Other Southern States and District of Columbia.

District No. 10. Mexico.

District No. 11. Canada.

XIV. United Engineering Society.

This Institute shall be represented upon the Board of Trustees of the United Engineering Society by three Members or Associates, one retiring each year, as provided in the By-Laws of the said United Engineering Society.

At the December meeting of the Board of Directors the Board shall designate a Member or Associate of this Institute to be a representative of this Institute upon the Board of Trustees of the said United Engineering Society for a period of three years beginning at the next ensuing annual meeting of said Society.

At any time when a vacancy shall occur in the representation of this Institute on the Board of Trustees of said Society, the Board of Directors of this Institute shall designate a Member or Associate to fill such unexpired term.

These representatives shall report in writing to the Board of Directors at its regular meetings held in March, June, September, and December, and at any other meeting, if called upon by the Board.

XV. Publication of a Bulletin.

The publications of the Institute shall include, in addition to the *Transactions*, a periodical called the *Bulletin* of the American Institute of Mining Engineers which shall contain reports of proceedings, professional papers, notices and other matter of interest to Members. From the annual dues paid by each Member, Associate, and Junior Member, five dollars shall be deducted and applied as a subscription to the *Bulletin* for the year covered by such payment. Special volumes upon technical subjects may be issued, by vote of the Board.

XVI. Obligations to Members.

Any Member of whatever class whose dues are paid within the limits set by the Constitution shall receive the *Bulletin;* and all Members and Associates who pay

ten dollars annual dues, also all Life and Honorary Members, shall receive in addition the *Transactions*.

XVII. Divisions.

Sec. 1. Professional groups to be known as Divisions of the Institute and to be organized from its members, may be authorized by the Board of Directors. Any Member of the Institute may register for membership in any Division in which he is interested and may resign therefrom provided he be under no financial obligation thereto.

Sec. 2. The officers of the Division shall be a Chairman, one or more Vice-Chairmen, a Secretary-Treasurer, and an Executive Committee. The Chairman, Vice-Chairman, and Secretary shall be *ex officiis* members of the Executive Committee of the Division. All officers of Divisions shall be elected annually by letter ballot by the members of the Divisions, and shall take office at the close of the meeting at which they are elected. They shall hold office for one year or until their successors are elected.

Sec. 3. A Division shall have the right to make rules for its own government, subject to the approval of the Board of Directors, not inconsistent with the Constitution and By-Laws of the Institute. The Board of Directors shall have the right to amend, annul, or add to these rules.

Sec. 4. Any Division may raise or collect funds to be expended for its own purposes and may have the entire management and control of such funds in so far as said management or control does not conflict with the provisions of the Constitution and By-Laws of the Institute.

Sec. 5. The Board of Directors shall have the right to recommend the dissolution of any Division subject to approval of such recommendation at any annual meeting of the Institute, in which case the net property of such Division shall be divided pro rata among all members thereof in good standing.

Sec. 6. Each Division shall furnish the Board of Directors on the 1st of February in each year an annual financial statement of its affairs in such form as the Board of Directors may require.

XVIII. Local Sections.

Sec. 1. A Local Section of the Institute may be authorized by the Board at the written request of ten Members residing within an appropriate distance of a central point.

Sec. 2. The Board shall define the territory of a Section.

Sec. 3. Only one Section shall be authorized in one locality or district.

Sec. 4. A section must consist of at least twenty-five members; if its membership falls below twenty-five in number, the Board may annul the Section.

Sec. 5. Only Members and Associates of the Institute shall be members of its Local Sections.

Sec. 6. All Members and Associates of the Institute residing within the territory of a Section shall be eligible for membership in such Section. But any such person failing within three months, after due invitation, to become a member of such Local Section, shall thereafter be admitted to its membership and privileges only on such conditions as said Local Section shall determine.

Sec. 7. The officers of a Section shall be elected, after the formation of the Section has been duly authorized, at a meeting of the members of the Institute within the territory of said Section, called by the sponsors of the Section, notice of said meeting and its objects being given to said Members at least thirty days in advance. Officers of Local Sections shall be elected for a term not longer than one year.

SEC. 8. The Officers of a Local Section shall be a Chairman, Vice-Chairman, Secretary, Treasurer (or Secretary-Treasurer), and such others as the Section may desire.

SEC. 9. It shall be the policy of the Board of Directors of the Institute to contribute from its funds for the necessary running expenses of each Local Section, when and so far as practicable, an amount not exceeding, in each year, twenty-five per cent. of the dues received from the members of said Section in said year, but in no case exceeding the sum of two hundred and fifty dollars. Requests for such appropriation shall be signed by the Chairman, Secretary and Treasurer of the Section.

SEC. 10. If the expenses of a Section exceed the appropriation made by the Board, the difference may be made up by voluntary contributions from the members of said Section, if it shall so determine. The Institute shall not be responsible for the debts of any Section.

SEC. 11. The Board reserves the right to cancel a Section, or readjust its territory.

SEC. 12. Papers presented at Local Sections, and discussions thereon if reported, shall be the property of the Institute. They shall be submitted to the Publication Committee and published in the *Bulletin* or *Transactions* or both, if approved. Such papers shall not be published elsewhere *in extenso* without permission of the Board. The reading of a paper before a Local Section shall not carry with it the right of publication in the *Bulletin* or *Transactions* of the Institute.

SEC. 13. Neither the author of a paper presented to a Local Section nor the Local Section shall have the right to reprint a paper or publish it in advance of the meeting without obtaining the permission of the Publication Committee of the Institute, which may refuse, or determine the details of such permission. Nothing herein shall forbid the abstracting of a paper by the press after its presentation before a Local Section.

SEC. 14. The Institute shall print advance copies of papers offered to Local Sections, in order to facilitate discussion thereon, provided that such papers are approved for such advance publication by the Chairman or Secretary of the Local Section and by the Publication Committee of the Institute.

SEC. 15. Papers read before a Local Section may also be offered for reading or discussion at general meetings of the Institute, and shall be given equal standing with the other papers on the program of said meeting, when approved by the Publication Committee.

SEC. 16. Each Local Section shall transmit promptly to the Secretary of the Institute announcements of its proposed meetings and an abstract of its proceedings, including the names of authors and titles of all papers read before it, for the purpose of preparing a report thereon to be published in the *Bulletin* of the Institute, and for the purpose of enabling the Board of Directors to comply with sections 17 and 18 of these regulations.

SEC. 17. The By-Laws and regulations of Local Sections shall be subject to the approval of the Board of Directors.

SEC. 18. No action shall be taken by a Section which shall contravene the Constitution and By-Laws of this Institute.

XIX. TECHNICAL COMMITTEES.

SEC. 1. A Committee on Iron and Steel, in charge of the interests of the Institute in this branch of its activities, is hereby established.

SEC. 2. Other Technical Committees may be authorized by the Board of Direc-

tors, charged with the consideration of such topic or topics as the Board may assign, and having the duty of providing papers and discussions upon such topics for the meetings of the Institute.

Sec. 3. The Board of Directors shall designate the officers thereof, who shall hold office for one year or until their successors are appointed.

Sec. 4. The officers of a Technical Committee shall be a Chairman, a Vice-Chairman, and a Secretary.

Sec. 5. The Committee may adopt such rules as are necessary for the convenient conduct of its affairs, subject to the approval of the Board of Directors, or its Executive Committee.

XX. Affiliation or Consolidation with Other Societies.

The Board of Directors may arrange conditions for the affiliation or consolidation with the Institute of any regularly organized group of engineers or any engineering society, whether heretofore or hereafter incorporated or otherwise, which by Constitution, By-Laws, and practice is in accord with the aims of this Institute.

XXI. Affiliated Student Societies.

Sec. 1. Any society of undergraduates at a technical school, comprising students in any branch of engineering, metallurgy, chemistry, geology, etc., may be recognized by the Board, in its discretion, as an Affiliated Student Society, and its name, together with the names of its President and its Secretary, may be published in the *Bulletin* or the Year Book of the Institute. The individual members of such a society will not be catalogued as individual Members of the Institute, but may at any time be proposed for election as Junior Members of the Institute, in the usual way, and receive the *Bulletin* of the Institute, when elected, upon payment of five dollars annual dues.

Sec. 2. Technical papers presented before any such society, and recommended by the officers thereof, will be received and considered by the Publication Committee as if offered by Members of the Institute, and, if accepted, will be published, with the names of their authors, and with due acknowledgment to the said Affiliated Student Society. The members of such societies shall be welcome to use the facilities of the office and library of the Institute.

Sec. 3. Upon the request of the Secretary or other designated officer of any such society, accompanied with the necessary remittance, not more than three copies of the *Bulletin* for one year shall be sent postpaid to him at the reduced price given to public libraries. One volume of *Transactions* may be similarly furnished, at the price charged to Members of the Institute for extra copies.

Sec. 4. The conditions and details of this relation between the Institute and Affiliated Student Societies may be changed at any time in the discretion of the Board of Directors of the Institute; and the relation itself may be terminated at any time by the action of either party.

XXII. Amendments.

Sec. 1. Amendments to these By-Laws may be made by vote of a majority of the Directors, provided the amendments have been proposed by a member of the Board at a previous meeting of the Board and copies of the same sent to all members of the Board at least 20 days before the meeting at which they are to be voted on, and an expression of opinion invited thereon. At a later meeting they may be amended in form, but not in substance.

SEC. 2. Any Member or Associate of the Institute in good standing may propose amendments or additions to these By-Laws by sending such in writing to the Secretary. The proposal shall be brought before the Board at its next meeting, and, if sponsored by any one member of the Board, shall pass through the course required in the previous section. If the proposal is not so sponsored, it shall be returned to the proposer.

SEC. 3. Amendments or additions to these By-Laws may be proposed by sending the same in writing to the Board of Directors so that they are received by them at least sixty days before a business meeting of the Institute, and providing they be endorsed by the signatures of at least twenty Members or Associates in good standing at the time.

It shall be the duty of the Board of Directors to have such proposals printed in the next succeeding issue of the *Bulletin*, and to provide proper facilities for a vote of the membership thereon by letter ballot before the said business meeting. If favored by a majority of the ballots cast, the amendments shall be reported at the said business meeting as adopted, and shall thereupon become effective.

AMERICAN INSTITUTE OF MINING ENGINEERS

29 West 39th Street, New York, N. Y.

PROPOSAL FOR MEMBERSHIP

Mr. .....
(Name in Full)

Occupation .....

Address .....

is hereby proposed by the undersigned, as a

.....

of the American Institute of Mining Engineers.

.....
.....
.....
Signatures of three Members or Associates.

Dated *191*

Professional Mining Engineers, Geologists, Metallurgists or Chemists, or persons practically engaged in Mining, Metallurgy, or Metallurgical Engineering, are eligible as Members. Students in good standing in engineering schools who have not taken their degrees and are nominated by at least two of their instructors are eligible as Junior Members. All other suitable persons are eligible as Associates.

The initiation fee for Members and Associates is $10, in addition to which the annual dues for the current calendar year is $10, of which amount $5 is to be applied for a subscription to the *Bulletin* of the American Institute of Mining Engineers, January 1, ..., to December 31,..... The yearly dues of Junior Members is $5, and they pay no initiation fee until transferred to another grade of membership. The annual dues for the current year is payable upon election.

Any Member or Associate not in arrears may become, by the payment of one hundred and fifty dollars at one time, a Life-Member or Associate, and shall not be liable thereafter to annual dues.

(FILL OUT REVERSE SIDE.)

Received | *2d Notice*

Elected | *3d Notice*

Accepted | *To Proposers*

EXTRACTS FROM THE CONSTITUTION.

ARTICLE II.

Members.

Sec. 1. The membership of the Institute shall comprise four classes, namely, 1. Members; 2. Honorary Members; 3. Associates; 4. Junior Members.

All members shall be equally entitled to the privileges of membership, excepting that Honorary Members, Junior Members, and Members and Associates whose residences shall be outside of the United States, Mexico, and Canada shall not be entitled to vote. * * *

Sec. 2. The following classes of persons shall be eligible for membership in the Institute, namely: as Members, all professional mining engineers, geologists, metallurgists, or chemists, and all persons actively engaged in mining and metallurgical engineering, geology, or chemistry; as Associates, all persons desirous of being connected with the Institute who in the opinion of the Board of Directors are suitable.

As Junior Members, all students in good standing in engineering schools who have not taken their degrees and who are nominated by at least two of their instructors. A Junior Member may remain such not longer than three years after leaving the engineering school, at the end of which period his qualifications to become a Member or Associate must be passed upon by the Membership Committee. If elected he shall pay at that time the entrance fee and dues of a Member or Associate.

Every candidate for election as a Member, Associate, or Junior Member must be proposed for election by at least three Members or Associates, must be approved by the Committee on Membership, as prescribed in the By-Laws, and must be elected by the Board of Directors.

Sec 4. If any person elected a Member, Associate, or Junior Member does not within four months after the mailing of notice of his election accept the same and pay his initiation fee, if required, and dues for the year in which he was elected, his election shall be null and void and he shall be notified thereof by the Secretary of the Institute; providing, however, that if elected in the months of October, November, or December, the candidate may, at his option, pay dues only for the ensuing year, in which case he shall be entitled to receive the *Bulletin* of the Institute for the months of November and December, but not the annual volume of the year during which he was elected to membership.

Sec. 5. The Board may at any time, for good and sufficient reasons, change the classification of a member of any class except Honorary Members.

USE THIS BLANK FOR CHANGE OF ADDRESS.

AMERICAN INSTITUTE OF MINING ENGINEERS,

29 WEST 39TH STREET, NEW YORK, N. Y.

..... *191*

Name .....

Occupation .....
(Title, Professional Position or Occupation.)

Business Address .....
(Include Name of Company. The Business Address only is printed in the Year Book.)

.....

Home Address .....

Send Bulletin, Notices, etc., to .....

Send Volumes of Transactions to .....

AMERICAN INSTITUTE OF MINING ENGINEERS

ORGANIZED 1871

INCORPORATED 1905